

BULLETIN

Santa Barbara
State Normal School

Santa Barbara, California

Announcement of Courses
1920 - 1921



CALIFORNIA STATE PRINTING OFFICE
SACRAMENTO

1920



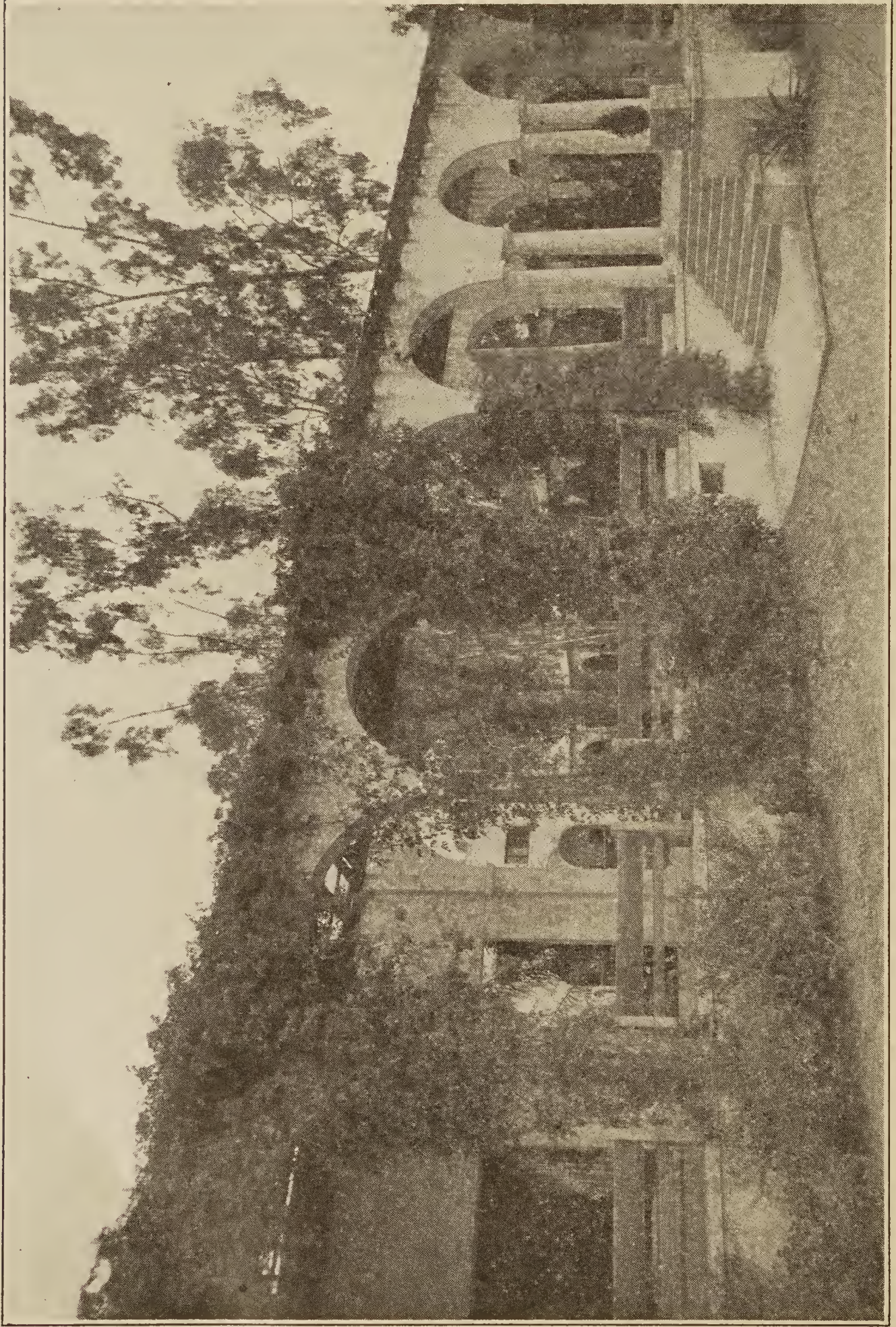
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BULLETIN
OF THE
Santa Barbara
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AND
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General View of Cloisters and Court of Main Building.

CALENDAR 1920-1921.

September 27	-----	Fall term opens
November 25-28	-----	Thanksgiving Recess
December 17	-----	Fall term closes
December 18-January 2	-----	Christmas Holidays
January 3	-----	Winter term opens
March 25	-----	Winter term closes
March 28	-----	Spring term opens
June 17	-----	Spring term closes

For information concerning Summer Term, opening June 28, 1920,
write for Summer Bulletin.

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*Summer Session only.

†Resigned at end of Summer Session.

HISTORICAL.

The Santa Barbara Normal School was founded by legislative enactment of March, 1909. It was established "to furnish to the people of both sexes such professional training in Manual Arts and Home Economics as shall fit them to teach in the public schools of this state in the departments of Manual Arts and Home Economics." The official name of the school was the Santa Barbara State Normal School of Manual Arts and Home Economics. Its first sessions were held in the Blake Memorial Building of the public schools of the city of Santa Barbara, the present commanding site on Mission Ridge being secured later, and the main building occupied in 1913. Since that time a group of buildings has been constructed and the facilities for doing effective school work have been constantly increased.

As buildings and equipment have increased in number and amount, the demands on the school for an enlargement of its scope of work have been met from time to time. An Art department was added because it was needed as a complement to Manual Arts and Home Economics. Then the Physical Education department was added to meet increasing demands for teachers trained in this line. Again, in 1919, another enlargement of the scope of work of the institution was made by legislative action in the interest of general professional training. The name of the institution was changed at this time to The Santa Barbara State Normal School, and the course of study was made to include the general professional training of elementary teachers as well as special teachers in Manual Arts, Home Economics, Art, and Physical Education.

LOCATION.

Santa Barbara is a most delightful little city of more than 20,000 population. It has one of the most attractive natural settings in the country, and the combination of its scenic beauty and its delightful climate attracts visitors and home-seekers



View of Interior Court, Main Building.

from all parts of the world. It is essentially a city of homes and has a superior type of citizenship, all of which taken together makes it an admirable place in every way for the location of an institution for the training of teachers.

The Normal School is built on a tract of land containing 14 acres located on Mission Ridge within the city limits. It overlooks the entire city and commands a view of the Santa Barbara Channel and the islands beyond it. Goleta Valley, with the Pacific Ocean in the distance, spreads out in another direction, while high mountains rising up impressively almost from the campus itself complete the grandeur of the picture which annually delights the thousands of people who come to view it.

CLIMATE.

Santa Barbara has one of the most equable climates found on the Pacific Coast. Variations in temperature from winter to summer are remarkably slight. The ocean breeze tempers the summer heat, and the mountains, which almost surround the city, break the force of winds and give protection in winter. The mean difference in temperature between summer and winter is only twelve degrees.

BUILDINGS.

Up to the present time four buildings have been erected as the needs of the school have warranted. The main building consists of the administration offices, class rooms, laboratories, and teachers' offices for the departments of Manual Arts, Home Economics, and Art, as well as the general library and the museum for the use of the whole institution. The Mechanical Arts building is occupied by shops for the milling and turning of wood-construction projects, and by the sheet metal, forge, automobile, and machine shops. The Physical Education

building is a newly built and thoroughly equipped gymnasium containing, in addition to the main floor for general exercise, offices, class rooms, an open-air play room, showers, lockers, and storerooms for both men and women. The Cafeteria building is the practical demonstration plant for the Home Economics Department, and serves the noon meal for the entire student body.

LIBRARY.

The library is a collection of carefully selected books and pamphlets. It consists of well balanced professional, technical, literary, and reference material which meets the requirements of all departments. In addition to the books selected and purchased by the school, friends have given the library valuable and useful private collections from their own libraries. The Adeline Mills special collection of books with its cases, library tables, and chairs was given to the school in 1909. Two private libraries of more than 2500 books were added by gift to the school in 1913. These are known as the "Roxana Lewis Dabney Memorial," and the "Library of Ellwood and Sarah Paxton Cooper." The Dabney Library has the best of literary selections, while the Cooper Library includes an excellent collection of books on trees and botanical subjects. In 1916 President Rich, on retiring, gave the library her collection of books and other helpful library material.

The periodical department is made up of the leading current magazines. These consist of selections covering the literary, professional, scientific and special fields, and furnish valuable material for work in the various departments of the school, and opportunities for cultural development as well. A large collection of foreign photographs, gifts to the school, is used for general reference work.

SHOPS AND LABORATORIES.

The institution has the following shops and laboratories:

Machine Shop—Equipped with lathes, milling machines, drills, grinders, planers, hack saws, and all necessary small tools.

Pattern Shop—Full assortment of lathes and tools of varied types.

Forge Shop—Equipped with various types of forges, a hardening and tempering furnace, a power hammer, and a full assortment of hand tools.

Automobile Shop—Equipped with necessary tools and run in connection with the near-by forge and machine shop.

Sheet Metal—Equipped with stakes, hammers, drills, cutters, brakes, and soldering furnaces. Complete equipment for course in metal and jewelry.

Joinery—Complete and varied equipment; power lathe, joiner, and grinder in separate room. Full equipment for gluing and clamping on one mezzanine floor, and complete facilities for staining, polishing, and finishing on another. A practical lumber room and a display room complete the equipment.

Printing—Two modern power presses; a full complement of type of several styles, trimming knives, stands, and binding equipment. Complete equipment for course in bookbinding.

Cooking—One room fitted with ranges, using gas, wood, and coal. Another uses electric range as well as gas and is designed for testing electrical cooking devices. Apparatus inexpensive. Designed for practical teaching rather than show. Practice dining room in connection. Silver, china, and linen

simple but dainty in character. Special practice room for research in dietetics.

Sewing—Two rooms fully equipped for sewing, dressmaking, and millinery. A mezzanine floor gives space for fitting, lockers, and individual supplies. A sun room overlooking the city connects with the dressmaking room and furnishes attractive display space.

Science—Two main laboratories equipped for work in inorganic, organic, physiological, food, and textile chemistry; for industrial chemistry for men; and for biology, physiological botany, bacteriology, and physiology. Facilities for special experimentation and research work in problems of sanitation and health.

Weaving—A collection of two-harness and four-harness looms of the Swedish pattern adapted and built by the school. A number of Barbour looms adapted for the purpose of making linen scrim weaves, and silk scarfs and bags. A pergola adjoining the main weaving rooms is fitted with stationary tubs and all necessary utensils for the dyeing of materials used in the weaving courses.

Pottery—A complete equipment on the ground floor of the main building with a kiln installed in the heating plant near-by.

Cafeteria—Completely equipped for class practice and service. Large, attractive dining room. Facilities for service for entire school, as well as for special functions of organizations of the city. Frequently these organizations take advantage of the school dining service by making arrangements for it in advance.

GENERAL INFORMATION.

Registration.

Students register with registrar on the Friday and Saturday preceding the opening of each term.

The schedule of studies for each student is made out by the faculty committee and the student is then enrolled. No student is admitted to classes without an approved study card which shall include all work required in the course elected.

Students may make changes after study cards are filled, only by formal petition on blanks provided, duly approved by faculty committee.

Students leaving before the close of the term will not receive credit for the full term's work. Record is kept of subjects taken, with hours and grades. The student may complete the number of hours required for credit at a later date and then receive full credit. Credit may be given in one or two subjects by special arrangement with the faculty committee of the department, approved by the dean.

Absence.

Students who discontinue their work without formal leave of absence will be reinstated only on formal petition giving explanation satisfactory to faculty committee.

Leave of absence will be granted by the dean, but such permit for absence will not relieve the student from completing all required work to the satisfaction of the instructors in charge.

Leave of absence for a long period will be granted upon written petition to the faculty committee. Said petition shall set forth length of time and reason for which the leave is desired.

Students are required to attend all assemblies—general and special—and all public lectures assigned by the faculty.

The daily program is so adjusted as to provide for the informal talks, lectures and meetings which, in the judgment of the president, are desirable.

Examinations and Reports.

Regular examinations are expected to be given in all courses at least twice a term. A formal report is made on the work of all students at the middle of each term and notices are sent to students doing unsatisfactory work, notifying them of that fact. Examinations are given at the end of the term and records of work are filed in the office.

Student Organizations.

The Student Body has charge of general matters that pertain to the welfare and happiness of the students. All social affairs are administered by a committee composed of representatives of the student body in co-operation with a faculty committee. The same is true of school publications and general entertainments which are undertaken from time to time as conditions warrant.

Several other organizations have more specific aims:

The General Professional Club is composed of students in the general professional department. They have for their purpose the cultivation of social activities and the development of a strong professional spirit.

The Home Economics Association is affiliated with the American Home Economics Association. It meets in an informal way for social purposes to discuss and hear discussed some of the problems of their work.

The Illahee Club is an association of young women students organized to promote satisfactory living conditions. It is conducted on the co-operative plan much the same as clubs and sororities in the colleges and universities.

The Young Women's Christian Association, while not strictly a school organization, is one of the important social agencies of the school. Arrangements have been made for the regular meetings of the association which are often open to the whole school.

The "Hiking Club" is an organization of students and faculty who make frequent trips into the near-by mountains. Sometimes the trip is of a few hours duration. Sometimes a picnic supper is enjoyed in the hills and the homeward trip made by moonlight. And sometimes a more extended trip is made, necessitating camping over night. Much benefit from a physical and social point of view is derived from participation in the activities of this group.

La Primavera Association is a city organization for the perpetuation of the memory of the early Spanish occupation of Santa Barbara. This is done through an historical pageant which is presented in the spring of each year. The students who are able to secure a place in the caste participate in the celebration.

The Alumni.

The Alumni organization has become quite a factor in the life of the school. Information is collected from all members each year through the questionnaire of the Appointment Secretary. Many new positions are secured for members by this means, and the institution is kept fully informed of its graduates.

Meetings are held each year in San Francisco and Los Angeles. The meeting in San Francisco last year was attended by fifty-six graduates of the school; and the one in Los Angeles by one hundred and four.

Lectures and Entertainments.

One of the features of the institution is the number of important lectures and entertainments which are secured. The

school is particularly fortunate in being able to secure the leading speakers and entertainers who come to Santa Barbara. Scarcely a week goes by without its event of note along this line. Among the speakers and entertainers of note who have appeared the last year are the following:

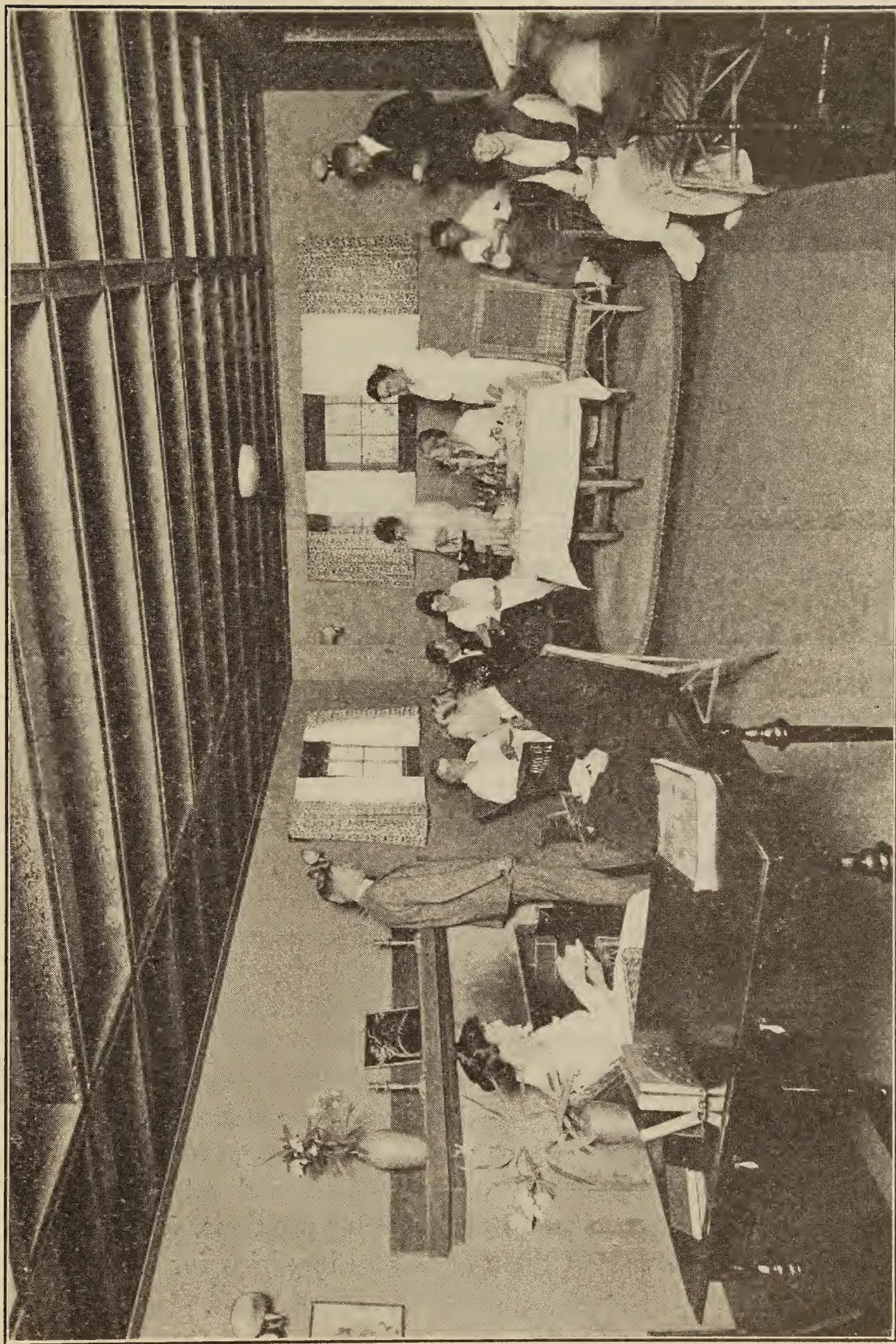
Dr. Henry Pritchett, President Carnegie Foundation; Bishop Logan H. Roots, Hankow, China; Hon. Thomas Nelson Page, former American Ambassador to Italy; Miss Madeline Veverka, Supervisor of Kindergarten and Primary Education, Los Angeles; Mr. Julian De Cordova, glass manufacturer of Boston; Mr. Wallace Rice, author and playwright; Mrs. Ednah Rich Morse, President Emeritus Santa Barbara State Normal School; Mr. John Kenneth Caldwell, American Consul at Vladivostok; Mr. Clarence H. Howard, President Commonwealth Steel Company, St. Louis, Missouri; Mr. Fernand Lungren, artist; Mrs. W. W. Burton, President Drama League, Los Angeles, California; Albert J. Wallace, former Lieutenant Governor of California; Professor Eugen Neuhaus, Director of Art, University of California; Dr. Virginia Murray, overseas service in Poland during world war.

Recreation.

Social affairs are in charge of committees of the student body and the faculty. Entertainments, teas, and several types of social parties are carried on at the school, while the city itself furnishes variety with its recreation center, churches, art studios, and homes which are open to students.

Clothing.

Men are expected to provide themselves with a sufficient number of wash coats and aprons of the pattern adopted, for bench and other classes. Men registering for any machine, forge, mill or vocational classes must be provided with a sufficient number of changes of overalls and soft shirts to maintain at all times a neat appearance.



A Social Tea in the Practice House.

Women students should be provided with plain clothing and with comfortable walking boots or shoes, light coats, and sweaters. Simple white tailored wash skirts, white wash waists and white cooking aprons are required for cooking laboratory; two white "Hoover" aprons for cafeteria; "overall" gingham or rubber aprons for chemistry; white sewing aprons, scissors, thimble, and tape measures for Household Arts.

Expenses.

There is no tuition. A registration fee of \$2 is payable on entrance. A student body fee of \$1 for the regular school year is collected at the beginning of each year. Those registering in the General Professional Department pay a general fee of \$2.50 per term; and those registering in special departments pay a fee of \$10 per term. In addition to these regular fees certain small laboratory fees may be charged, and in construction projects students will pay cost of material. Students are expected to keep their possessions in a locker. A key deposit of 50 cents is charged. In case of a student's withdrawal fees as a rule will not be returned. Textbooks will be purchased by the students.

Living expenses are about what should be expected in a small city. Students live in private homes and in the "Illahee" co-operative club, under the general supervision of the school. A noon lunch is served at cost. Living expenses range from \$25 to \$40 per month.

Opportunities for Graduates.

Our graduates are always in demand. The institution has never had an over-supply, and at present only a part of the positions available can be filled. Consequently, graduates can be placed to advantage both as to location and salary. The school is called on to fill not only teaching positions, for which it definitely prepares, but there are many inquiries for workers

in the various departments of the Y. W. C. A. and for persons capable of taking charge of and managing institutions, varying in character from tea rooms to hospitals.

Appointment Bureau.

The school maintains an appointment bureau for the mutual service of its graduates and boards of trustees desiring to fill teaching positions. There is no fee for the service rendered except that students wishing to avail themselves of the advice and help of the bureau are expected to join the alumni association for which a fee of one dollar is charged. There is no guarantee that positions will be secured, but since no difficulty has been experienced in placing our graduates a candidate can feel fairly confident of securing a satisfactory position.

The same interest is taken in graduates in service as in those just completing the work of the school. A question blank is sent out each year asking for information concerning the work and prospects of graduates. From the returns the bureau is able to be of service in securing promotions for progressive graduates, a matter quite as important as securing the first position. All candidates are expected to reimburse the bureau for telephone messages and telegrams found necessary by the Appointment Secretary when making efforts in their behalf.

The Ednah Rich Student Loan Fund.

This fund was established on July 1, 1916, by Mr. George F. Weld, Trustee, in honor of President Rich. The original amount has already been increased by other friends, and the fund is used to aid students in need of financial assistance. The loan is made either with or without interest—the payment of interest being optional with the student—with the understanding that the sum is to be returned as promptly as possible in small monthly payments, or in full. The loan accommodation is for full course students.

The Santa Barbara Student Loan Fund.

A new student loan fund has been established by Mr. William Wyles, a member of the Board of Trustees. It is available at a nominal rate of interest to students in the normal school, high school, and junior college of the city of Santa Barbara. This fund is already large enough to be of material assistance to a considerable number of students. It is hoped that it will ultimately be sufficient to furnish aid to all worthy students in this city who need assistance in securing a higher education.

Notes.

A unit in the normal school is one eighteenth of a matriculation unit. For example, a subject having five recitations per week for twelve weeks carries six units.

Marked deficiencies in credits in the subjects listed under general requirements will necessarily increase the length of the course.

As a rule from 24 to 28 units can be carried by the average student. By special arrangement as many as 30 units may be carried.

The school reserves the right to make changes in the course of study and to withdraw or change courses as listed.

ORGANIZATION.

The school has the following courses:

General Professional.

Music.

Art.

Home Economics.

Manual and Industrial Arts.

Physical Education.

The General Professional course is a two-year course based on graduation from an approved four-year high school course.

It prepares for general teaching in the elementary school, and may prepare for specialization in any of the special subjects. The courses in Art, Home Economics, Manual and Industrial Arts, and Physical Education are two-year courses based on two years of approved school work or the equivalent beyond the completion of a four-year high school course. Vocational work of an approved character may be accepted at half the value of school work. Preparation for entrance to the special courses may be made in the general professional course of the normal school, in junior colleges, colleges, universities, or by vocational or professional experience, or by combinations of these ways, provided equivalents are offered which satisfy requirements.

GENERAL PROFESSIONAL COURSE.

Regulations Governing Entrance and Undergraduate Standing.

General Qualifications.

Every person admitted as a student to the normal schools of the state must be of good moral character, of good health, without physical or other defect which would impair his fitness for the teaching service, of at least sixteen years of age, and of that class of persons, who, if of proper age, would be admitted to the public schools of the state without restriction.

Transcripts and Recommendations.

Application blanks are furnished upon request. A complete transcript of record is required together with the recommendation of the high school principal or other qualified educational authority. In case vocational or practical experience is presented as partial fulfillment of requirements for entrance to, or for advance standing in, any of the special courses, full statements of time of employment and nature of work must be made, and letters from employers approving the character of work must be filed. A health certificate signed by a physician is also required.

EXTRACTS FROM BULLETIN No. 14.

REVISED JULY, 1919.

PART I.

Information for Those Desiring to Prepare for Elementary School Teaching.

Recommended graduates of public high schools of California may be admitted provisionally to undergraduate standing in the normal schools of this state.

The fulfillment of three major conditions is necessary for graduation from any normal school in California. These are:

First—The passing of satisfactory examinations in the common school subjects listed under Part II, subhead IV; or the completion of the courses in the common school subjects listed under Part II, subhead IV.

Second—The completion, as a minimum, of the courses hereinafter listed.

Third—For graduation of students entering prior to July 1, 1921, the completion of twenty-four units of work, sixteen or seventeen of which shall be the units prescribed under Part II, subhead VI; for graduation of students entering after July 1, 1921, twenty-nine units of work, including the prescribed work.

Unit credits towards graduation will not be allowed for common school branches pursued as such in normal school or during the normal school period of training.

Persons planning to teach in the elementary schools should select their high school courses with that end in view.

If possible the student should complete in the high school all of the subjects listed under General Requirements. If it is not possible for the student to do this, and if his high school does not provide general applied science courses, he should select as his first choice the other required subjects.

PART II.

REGULAR TEACHERS COURSE.

Minimum Requirements for Admission to Regular Teachers' Normal Course.

III. REQUIREMENTS FOR PROVISIONAL UNDERGRADUATE STANDING.

(a) Graduates of public high schools of California, graduates of other schools of California recognized by the University of California as qualified to recommend students for entrance to said university, and graduates of schools of secondary grade of other states recognized by the president of the normal school concerned as equal in rank to any accredited public high school of California, who have completed a regular four-year course of study, and who are recommended by the principal of the school in which such a course of study was completed, may be admitted to provisional undergraduate standing.

(b) Teachers holding valid primary, elementary, kindergarten, kindergarten-primary or special certificates to teach in any county of the state may be admitted and given such provisional undergraduate standing as may be determined by the faculty of the school.

(c) Holders of normal school diplomas or certificates granted in other states, who present satisfactory evidence that they have had training equivalent to that required for admission to the normal schools of this state, may be admitted and given such provisional undergraduate standing as may be determined by the faculty of the school.

(d) Applicants for admission who present more than the minimum requirements for graduation from California high schools, or who have had advanced work in a postgraduate course in a high school, or in any institution of collegiate grade, may be admitted and given such provisional undergraduate standing as may be determined by the faculty of the school; provided, that no such student shall be graduated without passing a satisfactory examination in the subjects listed in Part II, section IV, and fulfilling all professional requirements.

(e) Holders of bachelors' degrees issued by institutions authorized by the State Board of Education to recommend applicants for the high school teachers' certificate, and holders of bachelors' degrees issued by American colleges and universities which are on the latest accredited list of the Carnegie Foundation, may be admitted and given such provisional undergraduate standing as may be determined by the faculty of the school; provided, that such persons may be graduated only after completing a minimum of two and one-half units of professional work in the normal school.

(f) Persons not qualifying under any of the above regulations who have satisfied the president of the normal school concerned that they have completed a regular four-year high school course or the equivalent, and who have passed acceptable examinations in three-fourths of the units of work required for high school graduation, may be admitted to provisional undergraduate standing. Only the examinations given for admission to the University of California or any other institutions in California authorized by the State Board of Education to recommend applicants for the high school teachers' certificate, and the examination given by the College Entrance Examination Board, shall be accepted as meeting this requirement.

(g) Persons over twenty-four years of age, not possessing the credentials prescribed above, may be admitted to provisional undergraduate standing on such special qualifications of character, education and

general intelligence as may, in the judgment of the faculty of the normal school concerned, be equivalent to any of the above requirements; provided, that no student shall be graduated without passing a satisfactory examination in the subjects listed in Part II, section IV, and fulfilling all professional requirements.

(h) Persons in the service of or honorably discharged from the service of the naval or military forces of the United States, or any auxiliary agencies recognized by the Department of War during the recent World War, who have reached the age of twenty-one years, not possessing the credentials prescribed above, may be admitted to provisional undergraduate standing on such special qualifications of character, education and general intelligence as may, in the judgment of the faculty of the normal school concerned, be equivalent to any of the above requirements; provided, that no student shall be graduated without passing a satisfactory examination in the subjects listed in Part II, section IV, and fulfilling all professional requirements.

IV. REQUIREMENTS FOR FULL UNDERGRADUATE STANDING.

Students who have fulfilled the requirements for provisional undergraduate standing, and who have passed a satisfactory examination in reading, writing, spelling, English grammar, composition, arithmetic, and geography, or who have completed the course or courses provided in these subjects in the normal school, may be admitted to full undergraduate standing. Such examination shall be given not later than the end of the first half-year after entrance into the normal school. Should the student fail to pass a satisfactory examination in any of these subjects, such student shall be remanded to a regular high school or normal school class offering work in the subject or subjects in which he has failed. In order that the standards of proficiency maintained in these subjects shall be uniform throughout the state, the State Board of Education shall from time to time adopt regulations governing such examinations. A graduate of a normal school or the holder of a bachelor's degree, or a teacher holding a certificate of elementary grade may be excused from any or all of the above examinations by the faculty of the normal school concerned.

MINIMUM REQUIREMENTS FOR GRADUATION.

No student shall be admitted to candidacy for graduation who has not been admitted to full undergraduate standing.

Before graduation, each candidate must complete credit courses beyond a complete elementary school course as follows:

General Requirements.

(Should be fulfilled in high school, but may be taken in the normal school.)

	High School units	Normal School units
English Language and Literature (elementary), including composition and oral expression-----	2	36
English Language and Literature (advanced)----	1	18
Physical Science, one year of general science, including the applied elements of physics, chem- istry, and physical geography-----	1	18
Biological Science, including general biology, physi- ology, hygiene and sanitation-----	1	18
History of the United States and citizenship, includ- ing local and state government-----	1	18
World History, either of the following:		
(a) General History, a year of general history with emphasis on modern European his- tory -----	1	18
or		
(b) World History, a two-year course in ancient, medieval, and modern history-----	2	36
Drawing and painting, emphasizing applied design	1	18
Music, including sight reading, three-part singing, and elementary harmony-----	1	18
Manual Training or Household Arts or Elements of Agriculture, including practical work in gar- dening, floriculture and plant propagation, one unit; provided, that for students entering after June 30, 1920, one unit shall be required in manual training or household arts, or both, and one unit in elements of agriculture, including practical work in gardening, floriculture, and plant propagation -----	1	18

Course of Study.

Psychology	6 units
History of Education.....	4 units
School Law and Administration.....	5 units
Sociology	4 units
Americanization	2 units
Citizenship	2 units
Public Health and Sanitation.....	4 units
Rural Education	6 units
Physiology and Hygiene.....	6 units
Primary Methods	6 units
Story Telling and Games.....	6 units
General Methods I and II.....	6 units
Arithmetic Methods.....	3 units
Geography Methods	3 units
History Methods	3 units
Language Methods.....	3 units
Teachers' Hygiene	2 units
Physical Education	27 units
Training School I, II, and III.....	18 units
Electives	28 units

NOTE.—Subjects listed under General Requirements may be taken as electives.

DESCRIPTION OF COURSES.**History of Education I.** 2 units.

The contribution of the Greeks, Romans and early Christians.
 The monastic, scholastic, humanistic and realistic movements.
 Naturalism and the early psychological conception.

History of Education II. 2 units.

A history of the development of education in the United States. The beginnings; early national and state attitudes; the awakening of an educational consciousness; battle for free schools; the battle to control the system; the influence of Pestalozzi and Herbart on American education; reorganization of elementary and secondary education; new directions and new conceptions due to new modifying forces.

Rural Education.

6 units.

A study of rural sociology and a brief survey of the social agencies of a typical rural community. The following topics are stressed: the one-room rural school; the consolidated school; equipment for building and playgrounds; rural school curricula; school clubs and rural projects.

Psychology I.

3 units.

A study of the mind and the principles governing growth and development. The work of the first term covers the following topics: the nervous system and brain, sensory capacities, images, perceptions, attention, habit, the laws of learning, and memory.

Psychology II.

3 units.

A continuation of Psychology I, and deals with the study of: the original tendencies; the instinctive reactions, characteristic in the different stages of development; the psychology of thinking; feeling and affection; emotion; and volitional states.

Sociology.

4 units.

A study of the organization of society, the nature of social progress and the agencies which promote it. Emphasis is placed upon the study of social conditions and forces which affect the welfare of the child and upon special social problems of the day. Recitation, reports on assigned reading and lecture. Field work.

Secondary Education.

5 units.

A study of origin, development, present status and organization of secondary schools. Considers the adaptation of the secondary school to social and community needs, problems

connected with the faculty, students, organization and curricula will be studied and discussed.

Lectures, assigned readings and reports.

Industrial Education and Industrial Problems. 2 units.

Especially designed for vocational students in Industrial Arts. Considers the evolution of industry, and the history of industrial education. Problems of Labor and Capital; the Trade Agreement; Strike; Lock-out; Labor legislation; Labor organizations; Workingmen's Insurance; profit-sharing and co-operation in relation to Labor problems, etc. Lectures, reports and assigned readings.

Public Health and Sanitation. 4 units.

Public hygiene; water supplies, their contamination and means of purification; garbage and sewage disposal; hygienic requisites of proper housing; application of the principles of sanitation in the plumbing, heating, lighting, and ventilation of the private dwelling, the school and the public building. Lecture and recitation.

Americanization. 2 units.

The task of dealing with the unassimilated foreign element in our land is divided into the following problems: a study of the conditions in the countries from which California receives the greatest number of immigrants, consideration of the social agencies and of their methods as a possible guide in developing a line of action which will make for the assimilation of the various racial strains, consideration of the methods of teaching the common branches and the principles of citizenship to adult foreigners; to foreign children.

Citizenship.

2 units.

The course takes up: a survey of the problems with which the citizen is confronted, and a consideration of certain facts about which the citizen must inform himself as an aid in their solution; a review of the stages in the development of the child as they concern the initiation of habits that make for good citizenship; a consideration of the laws of learning and their application to the training in specific virtues desirable in the good citizenship.

General Methods I.

3 units.

This course is designed to give a knowledge of the principles which govern method in teaching. School room practice is observed, analyzed, and classified as to type, and standards for judging instruction are developed. Some time is spent in the organization of subject matter into units suitable for presentation in the class room.

General Methods II.

3 units.

The study of educational measurements and intelligence tests; practice in giving tests and using scales, in scoring and tabulation, in the interpretation of data, and in the use of results to improve instruction.

Primary Methods.

6 units.

A study of the characteristics of the child in the Kindergarten-Primary period, and an analysis of the content of the curriculum as to its adaptation to the needs of the child from five to nine years of age. The following phases will be considered: Projects which may be organized about the natural and social interests of his environment; typical methods of organizing the class room, *e. g.*, the group, the individual, the free, and the conventional; methods of teaching reading, writing, spelling and phonics to beginners; devices for drill,

self-help, and for testing achievement in the lower grades; minimum essentials and the principles of psychology that govern special method in teaching young children.

Story Telling and Games.

6 units.

This course deals with the folk interests in game and story and is designed to give the student a basis for the selection and use of these materials. In addition to class exercises as much actual work with children will be arranged as is possible. Some time will be spent in dramatization and simple problems in pageantry will be worked out. Correlations with art, music, and the dance will be developed.

School Law and Administration.

5 units.

This course involves an intensive study of the state school code in order to safeguard the student from error in later work in the field. A further study of ideals which should govern legislation for schools leads to a critical study of the present status of educational administration in the state.

Arithmetic Methods.

3 units.

A course of study for all the grades is critically discussed and worked out. Principles of rationalization, the value of drill, development of independent thinking, accuracy and speed, applied problems, lesson plans, and grading are discussed at length.

Geography Methods.

3 units.

Aims of teaching geography; good citizenship, preparation for travel, interest in man's conquest of nature, definite knowledge of maps, places, and principles which animate geography. Study of the earth and man's relation to it. Physical, commercial, and industrial geography. Materials and methods of presentation suitable to the different grades.

History I. History in the Grades. 3 units.

Detailed outline of history for each grade. Bibliographies, programs, and courses of study; sidelights from fictional literature; methods of study and presentation, lesson plans, discussions; minimum essentials.

History II. American History. (Elective.) 3 units.

From colony to commonwealth. Discussion of critical periods in the social, political, and industrial development of the United States. Policies of America's foremost statesmen, from Hamilton to Roosevelt.

History III. Modern Europe. (Elective.) 3 units.

The last century of European history beginning with the Era of Metternich. Discussions will include the industrial revolution, the growth of nationalism, influence of Russia and Turkey, and the growth of empire, modern European states and their international relations existing before the war of 1914.

Physiology and Personal Hygiene. 6 units.

Deals with the physiological functions of the human body and an application of the principles in the study of personal hygiene.

Language Methods. 3 units.

An intensive study of grammar as a foundation for the teaching of the subject. The structure of the English sentence, and its rhetorical possibilities, the construction and use of every part of speech, sentence analysis, idioms, vocabulary building, usage of the best speakers and writers.

Teachers' Hygiene. 2 units.

A combination of modified courses in First Aid, Home Nursing and Symptomatology.

THE TRAINING SCHOOL.

The public schools of Santa Barbara furnish the laboratory for the study of the learning process under a corps of capable teachers chosen with a view to their fitness for this type of work. Special supervisors of subject matter hold conferences to assist in the selection of suitable subject matter and to discuss efficient methods of handling children.

The course of study has been recently revised in accordance with the best practices of the schools of this state. Plans are under way for the improvement of equipment in accordance with the new course of study, and a progressive policy is maintained in the development of this phase of the work.

Training School I.

6 units.

For the inexperienced, a period of observation and participation is required for the purpose of acquainting the student with the characteristics of children and with school methods. The student is required to assist in grading papers, in the preparation of materials and such duties as possess educational value for the future teacher. The amount of actual teaching done will be determined by the room teacher and will depend upon the ability of the individual to take charge of a class. Attendance upon weekly conferences is required.

Training School II and III.

6 units each.

Practice teaching with full responsibility for a class for a time to be determined by the department head is required of all students. Preliminary plans for the term as well as plans for smaller units of work are to be handed to the training teacher in charge and all possible effort is made to safeguard the interests of the children as well as to develop power in the student. Weekly conferences with the training teacher are required.

ENGLISH.

The professional requirements in English are met by courses outlined elsewhere. The following courses are presented for selection by students having time for elective work, and will be given when class enrollment warrants.

English 1. Reading.

4 units.

Special attention to pronunciation, articulation, enunciation, and tone production. Constant drill in reading for speech improvement. Words commonly mispronounced are corrected, and weaknesses in one's public address regulated and improved.

English 2a. Kindergarten and Primary.

4 units.

A study of the characteristics of the short story, what to look for in a story, elements of greatness, methods of presenting such stories to children. Bibliographies of stories to tell to children arranged for each grade. Emphasis on the simpler folk and fairy tales of various nations; myths and legends.

English 2b. Juvenile Literature, fourth to ninth grades, inclusive.

4 units.

Available poems and stories for children in the grades.

English 4. Composition.

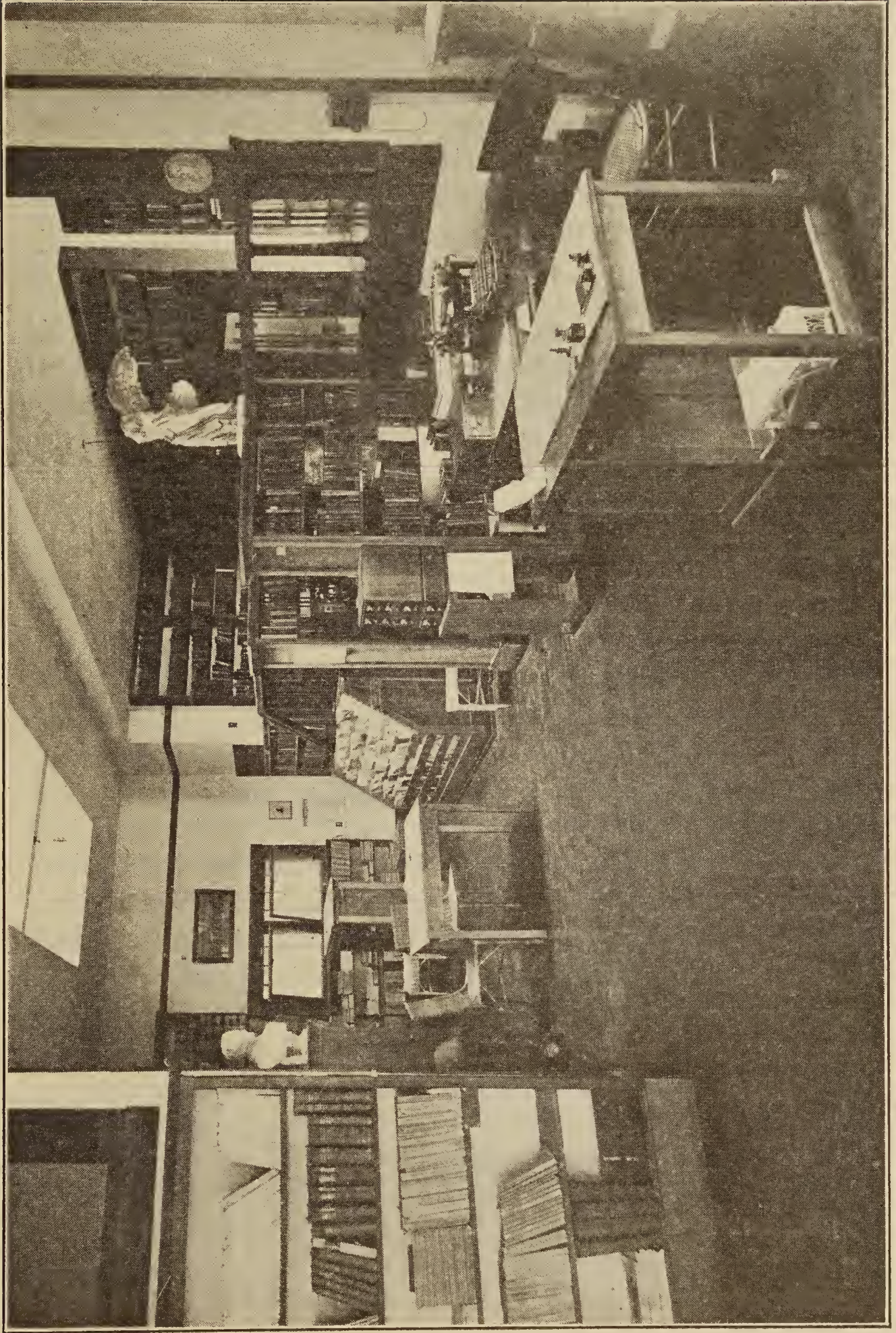
4 units.

The purpose of this course is to correct bad habits in writing through constant practice in written composition, and to give an appreciation of the best standards of good usage. Considerable formal study of the sentence and paragraph; the principles of unity, coherence, and emphasis. Essays are studied as types, which are outlined and discussed, followed by written essays.

English 5. American Literature.

4 units.

A study of the historical, critical, and literary masterpieces of American literature from the earliest Colonial period to the present day. An appreciation of American literature and its importance.



A Corner in the Library.

English 6. Shakespere. 4 units.

A careful study of several plays for the purpose of acquainting the student with Shakespere's human philosophy and dramatic power. Contemporary life of Shakespere is studied, also the contributions of contemporary playwrights are noted. One play of each type is studied.

English 7. Dramatics. 4 units.

A study of plays suitable for production in grade schools. Adaptation of historical material for presentation in play form. Study of simple costuming, scenery, amount of drill, effective grouping. Planning pageants, out-of-door festivities, etc. At least one out-of-door performance is put on by the class.

English 8. European Literature. 4 units.

A rapid survey of European literature. Readings and reports. Investigation of national tendencies in literature.

English 9. Modern Drama. 2 units.

The study of representative contemporary playwrights, including Barrie, Shaw, Galsworthy, Yeats, Lady Gregory, Maeterlinck, Ibsen, Rostand, Pinero, Jones, Wilde, Moody, Mackaye.

English 10. Practical English for Home Economics. 4 units.

This course aims to give practical suggestions concerning: reports, records, household accounts, family budget, business letters, items for newspapers; how to conduct committee meetings and conferences; presiding at gatherings, introducing speakers, programs and announcements, preparing papers for the club, outlines and syllabi.

MUSIC.

The courses are planned for two purposes: first, the training of students for general professional teaching; second, the preparation of special music teachers, for supervision in the grades

and for teaching in the high schools. Music 1, Music 2, and Music 3 are required for graduation from the General Professional Department. (Music 1 and Music 2 may be taken in the high school.)

In order for a student to pursue the courses which lead to secondary certification, the candidate must satisfactorily pass examinations in the following phases:

1. Piano playing—

(a) The ability to accompany the singing voice in such songs as are found in the Fourth Progressive Reader.

(b) Selected numbers from the individual's repertoire.

2. Vocal—Selected numbers from the candidate's repertoire.

3. Music writing—The writing of simple melodies from dictation.

4. Tone thinking—Candidate should reproduce at the piano simple melodies and simple harmonic progressions which have been dictated. Deficiencies in these phases may be made up.

The department admits students seeking secondary certification who have been graduated from an accredited state normal school in which they have specialized in music; or from institutions of collegiate grade where special emphasis has been given to music. Students will also be admitted who have the equivalent of high school graduation followed by private music study and who have pursued music as a vocation. Students completing the course will be recommended to the Commission of Credentials for certification.

A total of 144 units is necessary for graduation, 108 departmental hours being prescribed, the others being elective. This presupposes that the candidate has had general courses in Psychology, History of Education, Educational Psychology, General Science, California School Law, Sociology, Biology and Hygiene.

DESCRIPTION OF COURSES.

Music 1. Sight Singing. 6 units.

To give training in music thinking; the song as a whole; phrase idea; figures and intervals. Easy tonal and rhythmic problems; dictation and writing of melodies, familiar and unfamiliar. Individual singing.

Music 2. Sight Singing (advanced). 6 units.

More difficult tonal and rhythmic problems. Dictation and writing of more difficult melodies. Elements of theory; part singing. Individual singing.

Music 3. Music Education. 6 units.

Educational principles underlying the teaching of music in the grades. Organization of material for grade teachers. Application of the state series texts to different types of schools, such as rural, town, etc.

Music 4. Music Education. 3 units.

An advanced course for students specializing in the supervision of grade work. The developing of a course of study for music in the grades. Special problems: relation of teacher to supervisor, criticism of teaching, class room organization, individual differences, the rural school, music in the kindergarten, junior high school.

Music 5. Music Education. 3 units.

The teaching of music in high school. Organization of high school courses. The teaching of music history, music literature, harmony, chorus and glee club. Observation with student criticisms. Conducting. Bibliographies and study of available material for high schools.

Music 6. Teaching. 3 units.

Observation and teaching of music in the elementary grades, including primary, intermediate.

Music 7. Teaching. 3 units.

Observation and teaching in grammar grades, and junior high school.

Music 8. Teaching. 6 units.

Observation and teaching in the high school.

Music 9. History of Music. 6 units.

The development of the primitive systems; the influence of the early Christian era, school of counterpoint.

Music 10. History of Music. 3 units.

School of monophony and the romantic movement; history of opera; the development of the piano and music for the piano; history of the orchestra and the development of symphonic forms. The modern schools, including the French, Russian, and Norwegian.

Music 11. Tone Thinking. 3 units.

Identification and writing of musical ideas as are expressed and outlined by rhythm.

Music 12. Tone Thinking. 3 units.

Hearing and writing chords, chord neighbors; chord inversions; modulations, altered chords and chromatic harmonizations.

Music 13, 14, 15. Harmony. 6 units each quarter.

Harmonic dictation; chords; embellishments; modulation; composition.

Music 16. The Orchestra. 3 units.

Instruction in playing one orchestral instrument. Suitable literature for grammar and high school orchestras. Ensemble playing and conducting.

Music 17. Orchestration.

3 units.

Assembling of the conductor's score. Study of the qualities of the orchestral instruments. Orchestration of simple forms.

Music 18, 19, 20, 21, 22, 23. Voice.

4 units each.

The courses are arranged according to the capability of the individual, including fundamental training in management and control of breath, voice placement and tone production. English, French, Italian, and Spanish song literature will be used. Oratorio and choral practice. Public recitals.

Music 24, 25, 26, 27, 28, 29. Piano.

4 units.

The courses are arranged according to the capability of the student, including the works of Rameau, Handel, Couperin, Bach, Haydn, Mozart, Beethoven, Grieg, Tchaikowsky, Schubert, Chopin, Rubinstein, Schumann, MacDowell, Debussy.

SCIENCE.

The aim of the work in science is to give the students in the different departments the training in such courses of science as will enable them to have a better and broader understanding of their special work. In order for the student to become more efficient, wherever it is possible the science will be related to life and its processes so that the student may feel that it is a living, vital part of his every-day life.

For those entering from high school without the science prerequisites special arrangement will be made.

DESCRIPTION OF COURSES.

Physiology and Hygiene.

6 units.

This course deals with the structure and functions of the body, special attention being paid to muscles, digestion, circulation and nerves. The hygiene includes both personal and school problems of hygiene with a view to preserve and improve

the health in order to produce the greatest possible degree of efficiency. Required of all General and Home Economics students. Lecture and laboratory.

Biology.

6 units.

A course designed to give a view of all structure, development, reproduction, and later a study is made of the embryo. Special applications will be made for the Physical Education and Home Economics departments. Lecture and laboratory.

Physics.

6 units.

Lecture and laboratory course dealing with the principles and applications of physics laws to every-day life. Required of all General Elementary and Home Economics students who do not enter with high school credit. Lecture and laboratory.

CHEMISTRY I.**General Inorganic Chemistry.**

6 units.

This course includes a general survey of inorganic chemistry and the first principles of organic chemistry. It includes both lecture and laboratory work and is a strong foundation course for the sciences which follow. Lecture and laboratory.

Given for those entering without their chemistry prerequisites and for those taking special work.

CHEMISTRY II.**Organic Chemistry.**

10 units.

A study of the fatty and aromatic series with special emphasis on the paraffin series because of the application that can be made to food composition. The study of fats, carbohydrates, the end products of protein metabolism, and the acids used in preservatives and adulterations are detailed and comprehensive. Taken in connection with cookery. Laboratory and recitation.

Prerequisite: Elementary Inorganic Chemistry.

CHEMISTRY III.

Food Chemistry.

6 units.

The chemical composition of food materials; the analysis of the more common foods; the comparison of the nutritive values; and the relative economy of different articles of food. Sufficient work is given in food adulteration to emphasize the pure food standards and to know the laws relative to their purity and distribution. Laboratory and recitation.

Prerequisites: Organic Chemistry, Cookery I.

CHEMISTRY IV.

Physiological Chemistry.

6 units.

This includes a study of the physiological processes in digestion and assimilation; of enzymatic action in the body; of the metabolism of different foodstuffs; of the waste products; their formation and elimination and of the other processes the knowledge of which is essential to the proper understanding and care of the body. Laboratory and recitation.

Prerequisites: Organic Chemistry, Cookery I and II.

CHEMISTRY V.

Va. Textile Chemistry.

6 units.

This includes a thorough study of fibers and fabrics; their structure and reactions toward various physical conditions and chemical reagents; practical tests for distinguishing the fibers and methods for their separation in mixed or adulterated goods.

Dyes and Dyeing, with reference to commercial dyes.

Reaction of fabrics towards dyestuff and dyeing; development and combination of colors through the dyeing of samples preserved for reference and comparison when dyeing garments later. Dyeing of wool, linen, cotton and materials used in weaving and basketry. Laboratory and recitation.

Prerequisites: Organic Chemistry, Textiles.

Vb. Laundry.

4 units.

Hard and soft water; soaps and washing powders; bleaching; bluing, starching; methods of removing stains and general use of cleansing agents.

Laundering of wool, silk, linen, and cotton as found in simple form-units articles of personal attire or articles in common use in the household.

Laboratory and lecture.

Bacteriology.

6 units.

A study of molds, yeast and bacteria and their culture in the laboratory. Their relation to food industries and to food preparation and preservation is followed by a detailed study of the problems involved under the necessity of securing a pure milk and a pure water supply. Present-day theories of infectious diseases, their transmission and control, are considered, their relation to the preservation of human life. Laboratory and recitation.

Prerequisites: Organic Chemistry, Physiological Botany, Cookery I and II.

SPECIAL DEPARTMENTS.

The institution maintains four departments of work leading to special certification. In all of these it is fully accredited for elementary and secondary special certification. The rules and regulations governing recommendation for special certification, as well as the types of certification for which the institution is accredited, follow.

EXTRACTS FROM BULLETIN No. 10-S.

(Adopted by the State Board of Education, December, 1919.)

Each educational institution accredited by the State Board of Education to recommend to county or city and county boards of education individuals for certification in special subjects is authorized to

recommend only in the subject or subjects mentioned in its authorization. All such recommendations are subject to the following rules and regulations:

Elementary Special Certificates.

Educational institutions may recommend an individual for the elementary special certificate; *provided*, (a) that such individual has had at least three years' instruction beyond that required for graduation from a high school maintaining a four-year course in advance of the eighth grade, or that he possess an equivalent amount of training; (b) that at least one-half of the said three years' instruction has been devoted to study or work in the special subject or subjects in which the individual desires certification and in such subjects as are strictly supplementary thereto, or that he possess an equivalent amount of such special training; (c) that two-fifths of a year of the time required to be given to the special subject or subjects has been devoted to a study of the pedagogical subjects suited to the training of an elementary school teacher, at least one-third of which time shall be devoted to practice-teaching, including methods of instruction in the special subject or subjects, under competent supervision; *provided, further*, that institutions may be authorized by the State Board of Education to recommend individuals for certification in oral teaching of the deaf and in play and playground management upon qualifications other than those set forth above; *and provided, further, first*, that where teaching or practical experience is accepted as an equivalent for a part of the collegiate requirement specified under (a) above, the same shall not be accepted in lieu of more than one and one-half years of said requirement, nor shall it be substituted at more than half value; *second*, that where study or work in the special subject in the secondary school period, teaching, or practical experience is accepted in lieu of a part of the requirement in the special subject specified under (b) above, the same shall not be substituted at more than half value; and, *third*, that where teaching experience is accepted in lieu of the pedagogical requirement specified under (c) above, no less than one year of such experience shall be substituted for one-half of said requirement and no less than two years of said experience shall be substituted in lieu of the entire pedagogical requirement.

Secondary Special Certificates.

Educational institutions may recommend an individual for the secondary special certificate; *provided*, (a) that such individual has had

at least four years' instruction beyond that required for graduation from a high school maintaining a four-year course in advance of the eighth grade, or that he possess an equivalent amount of training; (b) that at least one-half of said four years' instruction has been devoted to study or work in the special subject or subjects in which the individual desires certification and in such subjects as are strictly supplementary thereto, or that he possess an equivalent amount of such special training; (c) that at least two-fifths of a year of the time required to be given to the special subject or subjects has been devoted to a study of the pedagogical subjects suited to the training of a secondary school teacher, at least one-third of which time shall be devoted to practice-teaching, including methods of instruction in the special subject or subjects, under competent supervision; *provided, further, first*, that where teaching or practical experience is accepted as an equivalent for a part of the collegiate requirement specified under (a) above, the same shall not be accepted in lieu of more than two years of said requirement, nor shall it be substituted at more than half value; *second*, that where study or work in the special subject in the secondary school period, teaching or practical experience is accepted in lieu of a part of the requirement in the special subject specified under (b) above, the same shall not be substituted at more than half value; and, *third*, that where teaching experience is accepted in lieu of the pedagogical requirement specified under (c) above, no less than one year of such experience shall be substituted in lieu of one-half of said requirement and no less than two years of said experience shall be substituted in lieu of the entire pedagogical requirement.

Form of Recommendation or Credential.

Credentials from accredited universities must include a recommendation of the candidate by the director of the school of education if there be one, otherwise by the head of the department of education and must be issued by the recorder or registrar. Credentials from accredited normal schools, colleges or technical schools must be issued by the presidents or principals of these institutions. All credentials must be issued on forms prescribed and furnished by the State Board of Education, and must be countersigned by the Secretary of the State Board of Education of California before they may be recognized as valid credentials. Each credential must state the type or types, the grade (elementary or secondary), and such specific special subjects as the candidate is prepared to teach. No credential shall be issued by any accredited institution in subjects other than those specifically listed in its official authorization.

Types of Special Certificates and Special Subjects.

The following is a list of the types of special certificates and of the special subjects in which this institution may recommend candidates for special certification by county or by city and county boards of education.

Manual and Fine Arts Type.

A certificate to teach any subject under this type will authorize the holder thereof to teach such drawing, mathematics, and accounting as are an essential part of such subject and for which separate credit is not given.

Elementary Grade—General manual training, including bench work in wood and cabinet work and such other manual work of a prevocational character as may be included in such a course; metal art and craft work; leather art and craft work; clay art and craft work; basketry and weaving; freehand drawing, painting and design; mechanical drawing.

Secondary Grade—Manual training, limited to bench work in wood and cabinet work, and such construction of a prevocational character as may be included in such a course; wood working machinery and wood manufacture; wood turning and pattern making; machine shop work; auto mechanics; auto electrics; forging; foundry work; sheet metal work; bookbinding; printing; mechanical drawing; architectural drawing; machine design; wood carving; metal art and craft work; leather art and craft work; clay art and craft work; book art and craft work; freehand drawing, painting, and design; modeling and sculpture; basketry and weaving; primary construction.

Household Arts Type.

A certificate to teach either of the following subjects will authorize the holder thereof to teach such drawing, mathematics, science and accounting as are strictly supplementary to a regularly organized course in said subject:

Elementary Grade—Household science and economy; household art and economy.

Secondary Grade—Household science and economy; household art and economy.

Physical Education Type.

A certificate to teach *general physical education* will authorize the holder thereof to organize and teach all physical training activities and to give instruction in hygiene and physiology.

Elementary Grade—General physical education; physical training activities; hygiene.

Secondary Grade—General physical education; physical training activities; hygiene; military training and tactics.

While the State Board of Education may grant special credentials in subtopics and topics included under physical training activities, institutions are not authorized to do so.

Outlines of the work offered in the special departments follow. The departments are listed in alphabetical order.

FINE ARTS EDUCATION.

Recommendation for Certificate of the Manual and Fine Arts Type.

The course as it is offered prepares for the teaching of Educational Art in elementary and secondary schools. It is planned to develop the creative faculty and to make for appreciation of fine things and the fine way of doing things.

Certification allows for the departmental teaching and supervision work in the elementary schools, or for teaching in high school.

Elementary Course.

Prerequisite: Freehand Drawing.

Education—

Psychology.

Sociology.

History of Education.

School Law and Administration.

Practice Teaching.

Americanization.

Physical Education.

Art Structure and Crafts.

Design and Color I, II.

Applied Design I.

Composition I.

Commercial Design I.

Industrial Design.

Costume Design.

House Planning.

Interior Decoration and Furnishing

Mechanical Drawing.

Pottery I.

Book Binding I.

Elementary Manual Training.

Weaving I.
Basketry.
Decorative Needlework.
Art Appreciation.
Theory and Practice of Teaching Art.

Secondary Course.

Prerequisites: Elementary Course in Fine Arts Education.
Education—

Secondary Education.
Industrial Education.
Practice Teaching.
Physical Education.
Art Structure and Craft Work.
Applied Design II.
Composition II.
Commercial Design II.
Bookbinding II.
Weaving II.
Pottery II.
Metal work, leather work, wood carving and advanced problems in the required crafts may be elected.

DESCRIPTION OF COURSES.

Design and Color I, II. 9 units.

I. This course provides the foundation for the courses that follow. A series of problems are given to teach the fundamental principles underlying line, mass, and color.

Design motifs are created from nature and other sources and adapted to space filling, as squares, circles, border, surface, etc.

Color is studied by experience in creating original and theoretic harmonies, and through observation of good color in nature, textiles, historic, pictorial, and decorative art.

Lectures are given on the origin of ornament, the principles of design, and the psychology and theory of color. These are well illustrated by examples of good art in textiles, wood-carving, etc., owned by the school. This course correlates with Domestic Art.

II. Continuation of Design and Color I.

Applied Design I, II.

9 units.

Prerequisite: Design and Color.

I. Original designs are applied to all kinds of craft work. Emphasis is given to printing on textiles; all hand processes are used such as wood block and linoleum printing, stenciling, batik, tie-dying, etc.

II. Advanced Problems—A continuation of Applied Design I.

Lectures and assigned readings on the history of Crafts.

Composition I, II.

5 units.

I. Realistic and decorative treatment of landscape, flower, and other natural forms.

II. Continuation of Composition I.

Problems given in Interior Decoration, Pageantry, Printing, etc.

Commercial Design I, II.

10 units.

Prerequisite: Design and Color.

I. A course in lettering given and followed by the application to advertising material, printing, posters, book covers, book plates, post cards, etc. Emphasis given to suitable type and color.

II. Advanced Problems.

Industrial Drawing and Design.

5 units.

This course is planned for correlation with Manual Arts and includes the study and application of the principles of perspective to freehand, blackboard drawing.

Original designs are made for furniture, woodwork, metal, etc. Special emphasis is given to construction, fitness to purpose, the influence of material, tools and processes. The course includes a study of Period furniture. Correlation with Manual Training Department.

Costume Design.

2 units.

Prerequisite: Design and Color.

Study of line, mass and color in relation to the human figure. Original designs are made for the different types of figures and for children.

Problems in adaptation from historic costume, in remodeling, etc.; original designs for embroidery, etc.

House Planning.

2 units.

The study of the architectural values of the house considers styles of architecture from exterior and interior; arrangement of interiors; of windows, alcoves, etc. Floor plans and elevation of rooms are drawn to scale with special attention to the kitchen, its arrangement and conveniences. Exterior elevations are drawn and garden plans are suggested. The various styles of houses in California—the bungalow and the concrete houses in town, and the mountain and beach cottages give a basis for study and discussion. The apartment with its problems is included in this course, as are the very important questions pertaining to color in interior furnishings. Outlines for public schools. Correlation with Home Economics Department.

Interior Decoration.

6 units.

The relation of the environment of the home to the mental, physical and spiritual well-being of the family, is studied in this course.

The principles of design are applied to the decorating and furnishing of the home and to the choice of wall coverings

furniture, rugs, hangings, china, etc. Study of period furniture. Lectures. Correlation with Home Economics Department.

Mechanical Drawing. 12 units.

See same under Manual and Industrial Arts Department.

Elementary Manual Training. 3 units.

A very brief course in elementary woodwork adapted to art students' needs. Toys and simple projects made with limited equipment from designs created in other courses.

Pottery I. 3 units.

Study of simple form in the round, such as fruit, animal, vase, bowl, etc., in relief such as tiles for use and illustration.

Suggestions for correlation with history, geography, nature study, English, etc.

Pottery II. 5 units.

General course of instruction in pottery; selection and preparation of materials; tools and equipment; planning of special projects involving problems of pottery decoration and manufacture; preparation of clays; glazes; modeling; building by hand; throwing and turning; mould making and casting; making of tile; processes of decoration; modeling; incising; slip decoration; graffito; underglaze painting; Watt and enamel glazing, etc. The use of the kiln is taught by actual firing for the biscuit and for the glazing.

Lectures on the history of the development of pottery.

Bookbinding I. 3 units.

I. Paper and cardboard construction for primary and elementary grades involving the use only of ruler, scissors, compass, steel straightedge and triangle, and teaching accuracy through

the construction of simple articles of use made in heavy paper, bristol board and light cardboard for cover work. This construction is especially desirable as a preparation for bench work and for use in rural schools where equipment is not possible.

Bookbinding II.

5 units.

II. Instruction in the construction of case binding, library binding, quarter to full bound, finishing, tooling, blind tooling, gold tooling, embroidery, and printed covers. Study of equipment, materials, etc. Courses of study to meet different grades and school conditions. Lectures on history of the book, binding of the book, type, illumination, gold tooling, etc.

Weaving I.

3 units.

The elementary course in weaving includes work on the two harness foot-power loom with instruction in the selection, preparation, and dyeing of materials. Special emphasis is given to the design and color.

The cardboard and wood hand-looms, suitable for making small articles are constructed and used. These are for use where there is limited or no equipment.

Weaving II.

5 units.

The work progresses in logical order from the two harness rug weaving to the complex four-harness weaving. Reading and making drafts is taught in this course.

Articles made are table runners, pillow tops, bags, silk hat scarfs, linen towels, reproductions of old colonial coverlets, and the adaptation of the historic patterns to different articles. Lectures on history and development of looms, on equipment, etc.

Basketry.

3 units.

The work in basketry is a part of the required work in both the Household Arts and Manual and Fine Arts courses. Spe-

cial attention is given to the study of form and to the application of the principles of design in decorative treatment and color. The instruction includes giving the student a knowledge of the materials, their preparation for use, and of the processes involved in both coiled and twined baskets, handles, borders, dyeing and staining, etc. Stitches in coiled baskets—Lazy Squaw, Mariposa, Navajo, split stitch, etc.

Lectures: History and development of basketry; methods of construction, materials, equipment, etc.

Decorative Needlework.

4 units.

An art embroidery course, the purpose of which is to illustrate the use of colored threads and silks in simple stitches, applicable to the decoration of gowns and clothing, is included in the applied arts course, but is elective for household arts students. Application of art embroidery is made to house furnishings, such as portieres, table covers, pillows, bags, etc.

This type of work gives opportunity for the application of color and texture to design problems.

Lectures on history and development of embroidery.

Art Appreciation.

4 units.

Stereopticon Lectures and reference work on the history of Architecture, Sculpture, Painting and Crafts. Illustrated notebooks are required.

Theory and Practice of Teaching Art.

18 units.

Prerequisite: Design I.

The course in Theory and Practice in Art is arranged to meet the needs of teachers in the elementary and rural schools, also for students in the Art department who are training to become special Art teachers. It is not necessary to be a student in the Art department to enroll in this course. The problems given are those which find immediate application in the

elementary schools. They are based upon the principles of design and are developed with industrial application. They consist of paper cutting of birds and animal designs for fabrics and toys. Brush drawing, stick printing on paper and cloth, making of paper and wooden tops, color in application to all problems. Special attention is given to problems for special days. Lectures are given on the selection and purchasing of equipment for city and rural schools. Attention is given to the making of lesson plans, and correlation of art with other subjects.

This course is closely related with the one given in Primary Handwork and together they give a very comprehensive understanding of the presentation of art in the elementary schools.

Leather Art and Craft.

4 units.

General course in leather tooling; study of material; tools and equipment; planning of special projects; study of principles of design and their application to articles made of leather or to leather covers for the bookbinding craft.

Study of use and development of decorated leather.

High and low relief; coloring and dyeing; embossing; sewing, etc. Applied to card cases, magazine covers, pocketbooks, bags, mats, etc.

Metal Art and Craft.

8 units.

Courses illustrating the application of design to metal work as a craft and as a vocation. Special attention is given to the fundamental processes of sawing, riveting, bending, soldering, brazing, raising forms from flat, wire and tube drawing, joining, polishing, coloring, etc.

The course includes the study of the types of metal construction in copper and brass, silver and gold.

Silver smithing and jewelry: enameling, etching, repousse, engraving, stone cutting, gold and silver jewelry.

Lectures on tools and equipment necessary for the technical operations involved; selection of suitable material; care and ordering of supplies; method of presentation to classes and groups; historical aspects of the subject.

All media are used—charcoal, crayon, water-color, oil, etc. Materials are furnished by the school on payment of the laboratory fee.

The school has a splendid collection of textiles—weaving, embroidery, cretonnes, etc. Wood-carving and other art objects have been loaned by friends of the school, and also a very fine collection of Indian pottery and weaving, a permanent loan, all of which is a great source of inspiration and training in appreciation.

Practice teaching is practical, being in the high school and grades of the city schools. Special work may be taken by anyone over eighteen years of age.

HOME ECONOMICS.

This department is organized under the following heads:

HOUSEHOLD SCIENCE AND HOUSEHOLD ECONOMY.

HOUSEHOLD ART AND HOUSEHOLD ECONOMY.

VOCATIONAL HOME ECONOMICS (SMITH-HUGHES).

The courses offered in Home Economics cover the requirements of the general professional course; prepare for elementary and secondary special certification to teach in the public schools of the state; for the administration of institutions, lunch rooms or cafeterias; and for dietetic work in hospitals.

The required work for Secondary certification, which covers two school years, or seventy-two weeks, following graduation from the two-year general professional course or its equivalent, falls under the heads of Education, Science, Art, and Special Technical subjects.

Students who contemplate entering the Home Economics Department should fulfill requirements in the following subjects either in the high school or in the general professional course in the normal school, or college:

Inorganic Chemistry.

Elementary Physiology.

Physics.

Psychology.

Biology.

History of Education.

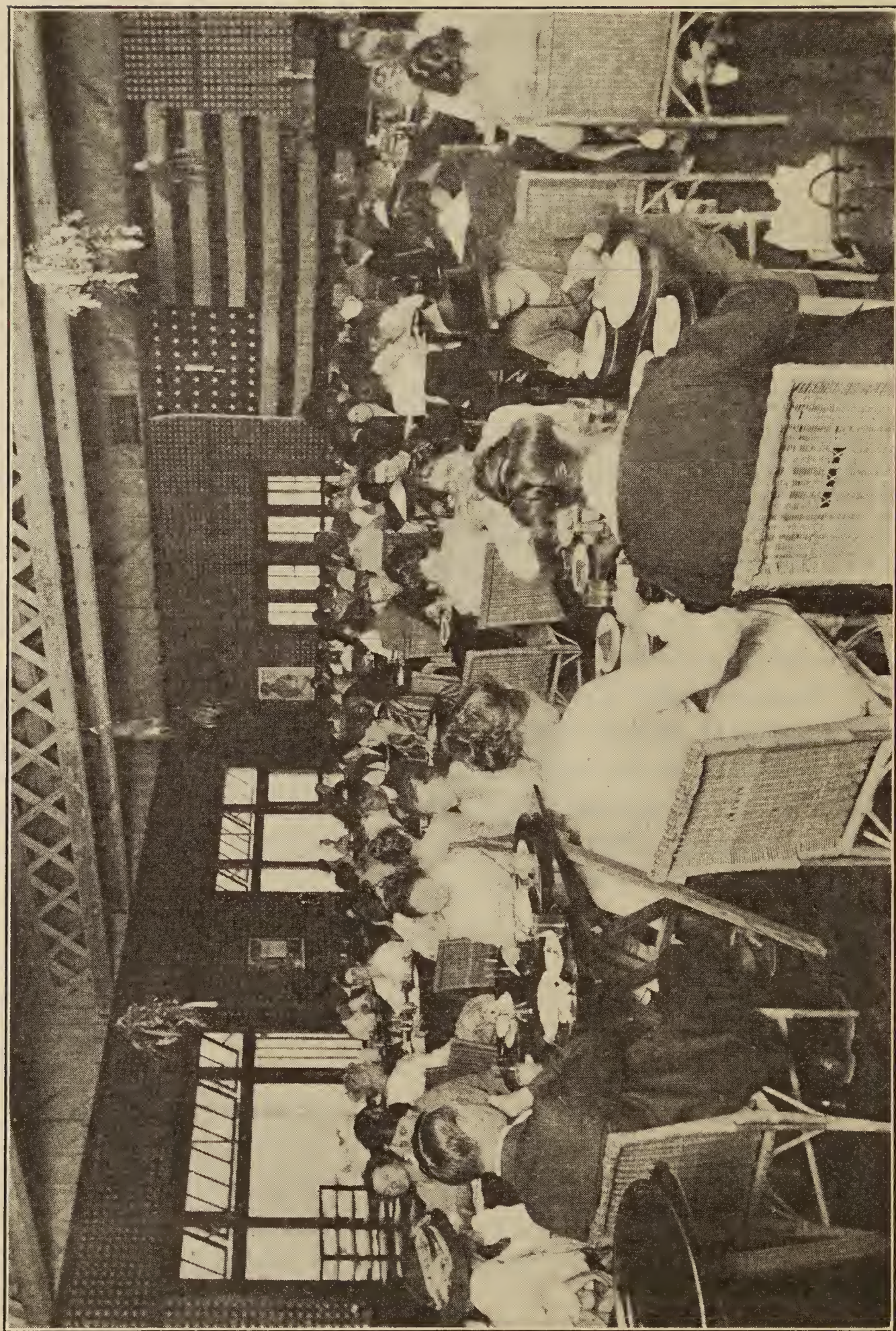
Sociological subjects.

Home reading.

Home Gardening.

Governmental subjects.

If the foregoing list of prerequisites has not been completed, a longer time than the 72 weeks will be required for the completion of the course.



Lunch at the Cafeteria.

HOUSEHOLD SCIENCE AND HOUSEHOLD ECONOMY.**Subjects Offered for Secondary Certification.****Education :**

Psychology -----	4 units.
History of Education-----	6 units.
Secondary Education -----	5 units.
Social Education -----	4 units.
School Law -----	2 units.
English, Oral Expression-----	12 units.
Practice Teaching -----	9 units.

(For detailed description of above courses see General Professional Courses.)

Science :

Organic Chemistry -----	12 units.
Advanced Biology -----	6 units.
Advanced Physiology -----	7 units.
Textile Chemistry -----	6 units.
Bacteriology -----	6 units.
Physiological Chemistry -----	6 units.
Food Chemistry -----	5 units.

(For detailed description of subjects, see Science.)

Foods and Cookery.

These courses consider food selection and food preparation in its scientific and economic aspects. The classification, the study of the nutritive value of various foods and the principles underlying their preparation; the selection of foods based on consideration of money, time, and labor involved; the study of staple foods, their production, manufacture, and the distribution of the raw material to the finished product; a study of recipes with the comparative costs of materials involved and the substitution of materials according to seasonableness and the nutrition desired; the serving of foods in simple and attractive forms; the processes of food preservation, etc., are some of the topics considered.

Each course in cookery takes up the detailed study of one or more of the main food classes or their combination.

Cookery	I. Study of simple carbohydrate and protein foods -----	6 units
Cookery	II. Detailed study of proteins; batters and doughs; freezing mixtures-----	6 units.
Cookery	III. Breads; fats; preservation of foods; invalid cookery.	
Cookery	IV. Large quantity cookery-----	7 units.

In the preparation of the noonday meal for a large number of students the dining hall and cafeteria gives an opportunity for application of the principles taught and demonstrated in the food course. Accuracy and speed in manipulation are here developed; the planning of proper and appetizing menus; the consideration of cost of food materials and of time and labor involved in the preparation; the serving and the cleaning-up processes give practical experience in the directing of groups of workers. The purchasing of large quantities of materials, practice in general management, the best methods of accounting, are under the direction of a faculty manager. Meals are served at cost, which includes food, fuel, breakage and service, this department maintaining itself without assistance.

Prerequisites: Inorganic Chemistry, Cookery I and II.

Dietetics.

12 units.

A presentation of the underlying principles of human nutrition and the application of these principles to the feeding of individuals, families, and larger groups under various conditions of health and environment; the relation of dietetics to various diseases; the feeding and care of infants and of children; the discussion of modern dietary standards and their application to practical problems, with special reference to limitations of cost and caloric value, based on income and on the conditions above mentioned.

The laboratory work emphasizes the comparative nutritive value of foods; the application of the 100 caloric and standard portions; the comparative cost and the preparation of meals served, according to the various dietary standards; the modification of milk and artificial foods for infant feeding; and special diets for the abnormal conditions of the body caused by improper feeding or conditions of living.

Prerequisites: Organic Chemistry, Physiological Chemistry, Cookery.

Preparation and Serving of Meals.

1 unit.

Lectures and demonstrations of various forms of service are followed by the preparation, the serving, and the criticizing of the many different types of meals and the careful observation of the specific rules for serving. Special consideration is given to the proper combination of foods; their caloric value; attractive service; and the economy of foods, fuel, energy, labor and time expended.

Prerequisites: Cookery and Dietetics.

Marketing.

2 units.

Lectures, using illustrative materials to compare the nutritive value of various common brands of canned goods, of staple articles, of fresh foodstuffs in the local markets in typical districts in California. A cost comparison based on actual food values with modification by flavor and by seasonableness is considered. The buying of fresh vegetables and fruits is made practical by actual purchasing. Local markets demonstrate wholesale and retail cuts of meat emphasizing the cheaper ones.

Prerequisites: Cookery I and II.

Demonstration.

1 unit.

Presentation of some particular problem in the preparation of certain foods or combination of foods is given by each

student. The demonstration demands intensive preparation for the satisfactory illustration of the scientific principles involved and of the manipulation of materials. This consideration of the economic and nutritive value of the foods handled opens opportunities for broadening the knowledge of the class along specific food lines, as well as for developing in the individual ability to present facts concisely, definitely, and in a manner to hold the interest of the auditors.

Prerequisites: Cookery and Dietetics.

Household Management I.

2 units.

Actual laboratory work in the care and proper methods of cleaning in the home as related to kitchen and dining room furnishings, a study of materials and their costs; methods of sweeping, dusting, etc.; care of the several different rooms in the home; proper method of bed-making. A study of fuels in reference to light, heat, and cooking. A study of kitchen equipment according to material involved and care of same.

Household Management II.

4 units.

Home Administration; household accounting and economics of the home.

The course accepts housekeeping and home making as a profession, and considers division of income; household accounting; necessity for and practical methods of the keeping of individual accounts; high cost of living with suggestions as to the probable causes and the possible methods of reformation; the cost of materials and labor involved in furnishing and maintaining a home. Special study is made with reference to the facilitating of household operations, to the employment of labor-saving devices, and adjustments of the problems of service in the home and in the institution.

- Public Health and Sanitation.** 4 units.
(See General Professional.)
- House Planning.** 4 units.
- House Furnishing.** 2 units.
- Design.** 4 units.
- Interior Decoration.** 6 units.
(For detailed description of above subjects, see Fine Arts Education.)
- Laundering.** 6 units.
Laundering of wool, silk, linen, and cotton as found in simple articles of personal attire or in student's classroom sewing models, as well as the articles in common use in the household.
Prerequisite: Textile Chemistry.
- Home Gardening.** 6 units.
Practical demonstration work under supervision. Lectures.
- Survey of Home Economics.** 2 units.
An introductory course to the field of home economics; the history of the home economics movement; its relation to the development of other special forms of education; various types of schools and classes; vocational opportunities other than teaching; and the study of present-day problems as they open new fields for work and workers in home economics.
- Seminar in Home Economics.** 2 units.
Planning of courses for elementary and secondary work and the special classes; planning of courses in the sciences relating to household arts; cost and kind of equipment.
- Hygiene.** 3 units.
Hygiene, including Home Nursing, with special emphasis laid upon the care of the child.
- Practice House.** 2 units.
Demonstration living in the Practice House on the campus.

Physical Education, Including Children's Games. 7 units.

(For detailed description, see Department of Physical Education.)

Institutional Management.

Entrance requirements for candidates for Institutional Management certification are based on high school training and graduation or the equivalent, plus a certain degree of maturity coupled with good health. Some previous business experience is desirable.

Courses offered for this class of students is as follows:

Chemistry.

Psychology.

Physiology.

Social Education.

Cookery I.

Cookery II.

Cookery III.

Cookery IV. (Large quantity cookery.)

Dietetics.

Marketing.

Demonstrations.

Serving of meals.

Household Management.

Household Accounting.

Institutional Management.

Cafeteria Management.

House Planning.

Laundering.

Elementary Sewing.

Inspection of Institutions, such as hotel and hospital kitchens, reformatories, etc.

II. Additional special practice as dietitian gives the student an opportunity for planning and controlling the larger part of

the work in the cafeteria under the direction of the manager. The accounting of the day's expenditures and receipts involves study of methods of bookkeeping, of checking attendance, etc. Estimating, purchasing and taking inventory give practical experience in the administration which enables the graduate to meet actual conditions satisfactorily in hospital or other institutions, and in school cafeterias; problems in planning and purchasing foodstuffs for meals; aims at systematizing methods and data given in connection with food work in large quantities.

III. Management of the dining hall and cafeteria for a specified time enables the student to put into practice all previous instructions along lines of cookery and management; taking full charge of the planning of the meals and of the buying for the same; of directing the work as done by the regular cookery sections; of accounting; of administration; of special service for groups; are some problems that are constantly presenting themselves for solution.

Length of course, 48 weeks.

Dietitians.

The course of study for dietitians coincides with the household science work of the Home Economics Department, except that certain problems peculiar to the dietitian are stressed by individual assignments. These, in the main, fall under the heads of physiology, invalid cookery, and pathological dietetics. These special assignments can be carried in connection with the regular courses pursued by students seeking secondary certification. This course can be completed in thirty-six weeks, or one school year, but it is recommended that the course in Institutional Management be taken in connection with it. This can be done by the addition of another term of twelve weeks.

VOCATIONAL HOME ECONOMICS (SMITH-HUGHES).

Students admitted to this course must have had four years of schooling beyond a complete elementary school course, or its equivalent, and have had at least four years experience after the age of eighteen in the management of a home, performing the usual duties of a housekeeper. Preferably, she should have had experience in the maternal care of children. Having satisfied the school authorities as to her character and general intelligence, she will be required to pass (*a*) a written test based upon her practical experience in home-making; (*b*) a conversational test based upon an informal discussion of certain prescribed topics; (*c*) a practical test on her ability to plan, buy and construct a child's garment; and to plan, market, serve, and compute the cost of a complete meal. Having satisfactorily passed these tests, she should be entitled to enroll in the subjects enumerated under Household Science and Art, and Household Economy type, for secondary certification.

On the completion of her two years course she shall receive a state certificate entitling her to teach in secondary schools.

DOMESTIC ART.

(Clothing and Textiles.)

Clothing I.

4 units.

This course includes the making of fundamental stitches which are applied on simple articles suitable for grade sewing, the use of the sewing machine and its attachments. Hand and machine sewing applied to simple garments. Darning, patching and mending.

Clothing II.

4 units.

A continuation of Clothing I and is based on the fundamental principles underlying the construction of undergarments. A

limited amount of drafting is given in this course, also the cutting and making of a middy blouse.

Clothing III.

4 units.

The making of a wash dress. This course is planned to teach the fundamental principles of design and choice of proper material suitable for a wash dress, including the trimming. The study and use of commercial patterns are taken up thoroughly. This course also includes the making of children's garments.

Clothing IV.

4 units.

This course includes the cutting and making of a wool dress with the aid of commercial patterns, also the making of a silk blouse with the application of simple embroidery or decorative stitches.

Clothing V.

4 units.

This course is designed to give intensive study in the choice of materials, and trimming, and the making of a silk dress. Consideration of quality; suitability and cost of material are discussed. Emphasis is laid on the use and adaptation of the commercial pattern.

Textiles.

4 units.

A study of textile fibers, their structure and properties; manufacturing conditions; intensive consideration in selection, and purchase of materials for clothing and household furnishings.

Millinery.

4 units.

This course is arranged to meet the demands of teachers in the elementary and high schools. The course includes practice in the making and covering of frames, the preparation of trimmings, the making of bows, flowers and other trimmings.

Tailoring.

4 units.

Required, Clothing 1, 2, 3, 4, 5. Qualified students are given the opportunity to elect tailoring. This course is designed to teach the technique and methods of construction employed in the making of tailored suits or coats.

Seminar.

2 units.

The theory of teaching Household Art. This course considers the problems of teaching sewing and textiles in the elementary and secondary schools. The comparison of courses of study in different schools and cities; and different types of schools under varying conditions of equipment and management; planning courses of study which includes the organization of the subject-matter and methods of teaching.

Modeling and Drafting.

2 units.

Prerequisite, Courses 1, 2, 3. Elective. Instruction and laboratory practice in the making of patterns by drafting, modeling and designing. This course gives training in the alteration of patterns and taking of accurate measurements. Good design is emphasized.

House Furnishings.

2 units.

A study of the textile fibers used in standard materials in house furnishings. This course concerns itself with the identification and grading of household fabrics, their names, prices, widths, weave and wearing qualities, as well as the care and use of these fabrics.

General Statement: It is possible for students to take the full course in Domestic Art without having to meet the expense of purchasing materials required in these courses. Arrangements can be made with the instructors whereby these materials will be supplied. Special attention is called to the fact that all materials and designs provided by students are subject to the approval of the instructor.

MANUAL AND INDUSTRIAL ARTS.

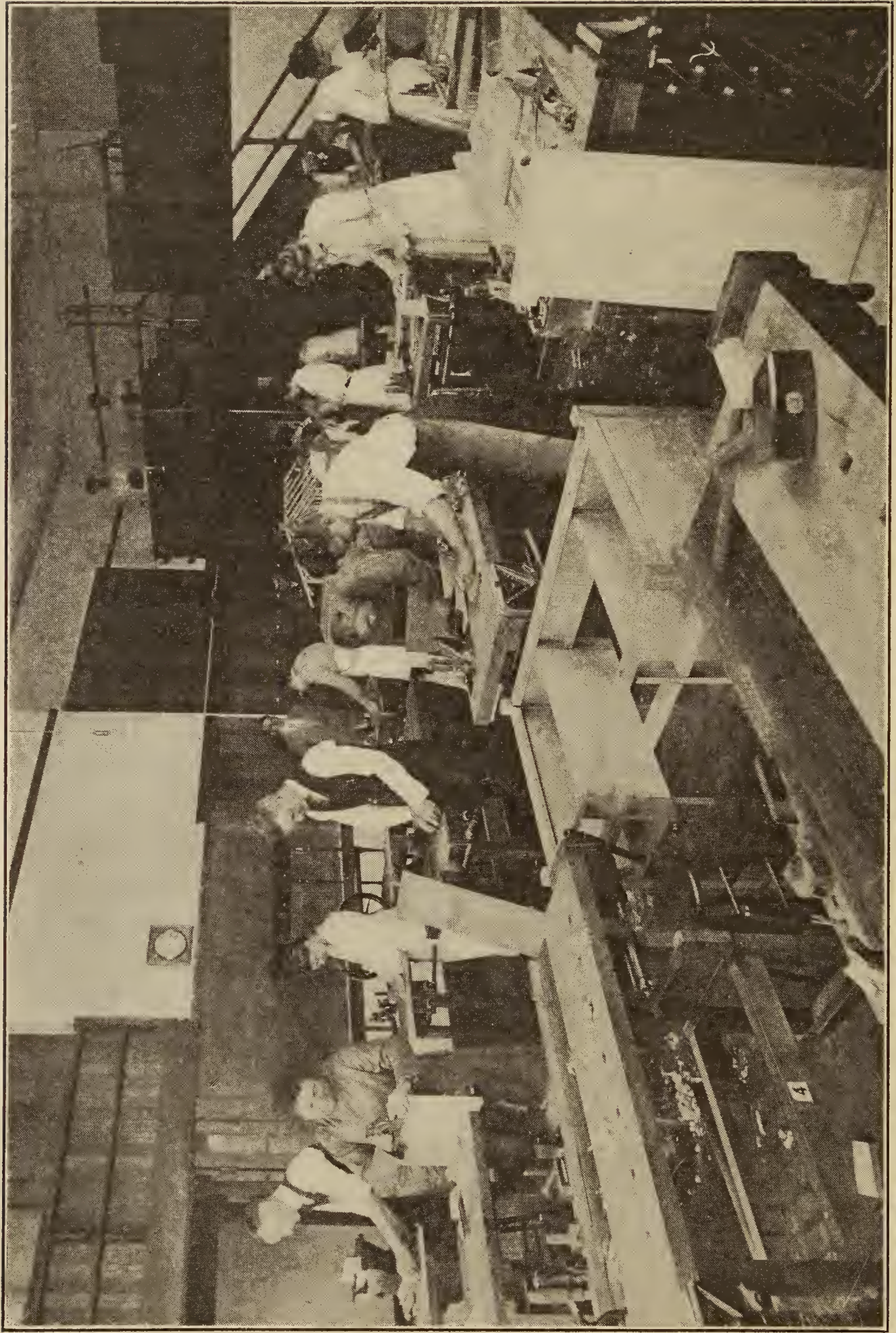
The demand for competent teachers of the Manual and Industrial Arts far exceeds the supply throughout the United States generally. The awakening of the American people to a realization of the importance of industrial efficiency to national security, together with the tendency to regard the Secondary school as the logical place for special instruction in the trades and industries makes the future of teachers of the special subjects very promising.

The department offers a wide range of subjects to meet the various demands of the state, out of which the student may select a group related to his major interest.

Two distinct courses are given, the Woodworking course of Elementary and Secondary grade, and the Metalworking course of Secondary grade only. The normal time for Elementary certification is 60 weeks, and for Secondary, 72 weeks. Special arrangements as to the time are made with students who have completed some of the required subjects, but the minimum residence requirement for graduation is one year.

In case a student has had considerable training, or vocational experience in either Woodwork or Metalwork, it is possible to secure certification in both courses in the 72 weeks. Those who wish to be credited with previous work are expected to bring evidence of the same. In order to avoid unnecessary duplication, students who have had work in Mechanical Drawing should present their plates to the instructor in charge.

This department is supplied with the most up-to-date machinery and equipment, which is entirely adequate for handling the work offered.



Cabinet Shop.

Woodworking Course—Elementary.

Benchwork in Wood and Cabinet Work-----	12 units.
Woodworking Machinery -----	6 units.
Advanced Furniture Construction-----	12 units.
Wood Turning -----	6 units.
Wood Finishing -----	3 units.
Organization, Equipment and Economics of Shops-----	2 units.
Working Drawing -----	3 units.
Mechanical Drawing -----	6 units.
Shop Mathematics -----	3 units.
Business English -----	3 units.
Physical Education -----	6 units.
Industrial Design -----	4 units.

EDUCATION.

Psychology -----	4 units.
History of Education-----	3 units.
Social Education -----	5 units.
Industrial Education and Industrial Problems-----	2 units.
Americanization -----	4 units.
Practice Teaching -----	8 units.
School Administration and School Law-----	4 units.
Electives-----	7 units.

Woodworking Course—Secondary.

Primary Handwork -----	6 units.
Bench Work in Wood and Cabinet Work-----	12 units.
Advanced Furniture Construction-----	12 units.
Wood Turning -----	6 units.
Pattern Making -----	6 units.
Carpentry and House Framing-----	6 units.
Wood Finishing -----	3 units.
Printing -----	6 units.
Sheet Metal -----	6 units.
Organization, Equipment and Economics of Shop-----	2 units.
Industrial Design -----	4 units.
Shop Mathematics -----	3 units.
Mechanical Drawing -----	12 units.
Business English -----	3 units.
Physical Education -----	7 units.

EDUCATION.

Psychology -----	4 units.
History of Education-----	3 units.
Social Education -----	5 units.
Industrial Education and Industrial Problems-----	2 units.
Americanization -----	4 units.
School Administration and School Law-----	4 units.
Practice Teaching -----	12 units.
Secondary Education -----	5 units.
Electives-----	11 units.

Metalworking Course—Secondary.

Auto Mechanics -----	12 units.
Machine Shop -----	24 units.
Forge -----	9 units.
Wood Turning -----	6 units.
Pattern Making -----	6 units.
Sheet Metal -----	6 units.
Mechanical Drawing -----	12 units.
Shop Mathematics -----	3 units.
Organization, Equipment and Economics of Shop-----	2 units.
Business English -----	3 units.
Physical Education -----	7 units.

EDUCATION.

Psychology -----	4 units.
History of Education-----	3 units.
Social Education -----	5 units.
Industrial Education and Industrial Problems-----	2 units.
Americanization -----	4 units.
Practice Teaching -----	12 units.
School Administration and School Law-----	4 units.
Secondary Education -----	5 units.
Electives -----	15 units.

DESCRIPTION OF COURSES.**Primary Handwork. 6 units.**

This course is planned to meet the needs of elementary teachers in the first five grades. Its purpose is to offer to teachers a knowledge of problems and their handling that will

permit children to exercise greater freedom in individual expression along constructive lines.

The problems given are those which appeal to the social instincts of the child and permit of an industrial application. The materials used are those that are adapted industrially to the problem in hand.

The course includes:

Paper and cardboard construction.

Applied to furniture and toy making.

Basketry.

(a) Raffia.

(b) Reed.

(c) Native materials.

Weaving.

Small hand and cardboard looms.

Clay Modeling.

(a) Plasticene.

(b) Simple pottery.

Elementary Bookbinding.

Toy Making.

Benchwork in Wood and Cabinet Work.

12 units.

This course covers the fundamental principles of woodwork and its adaptation to the purposes of the grades. Concurrent with the benchwork, there will be discussions on methods of presentation and the ways and means of conducting the work in the public schools. It also considers the methods of building courses of study.

Woodworking Machinery and Manufacture.

6 units.

This course affords practice in the use of such machines as are found in the average planing mill. Standard methods of construction are followed and a study made of their adaptation to school purposes. For one half of the course, students do

such work for the school as is needed, *e. g.*, construction and repair of equipment, school furnishings, etc. The last half of the course may, if the student desires, be spent in making projects for himself.

Advanced Furniture Construction.

12 units.

Considers the principles involved in good furniture construction. Application of the principles will be made in the construction of advanced furniture projects.

Wood Turning.

6 units.

Planning of special projects with their relation to design, to use, and to the wood used, for the acquisition of skill in face plate and chuck turning. Discussions on the care of the wood lathe and tools, and selection and study of woods, and on design in relation to wood turning.

Pattern Making.

6 units.

This course follows introductory work in wood turning and construction. The patterns are tried out in moulding sand that the students may be impressed with the accuracy made necessary by the requirements of the moulder. Visits are made to the foundry, where school castings are made under observation. The problems divide into groups as follows:

Group 1. Draft and shrinkage.

2. Finish.

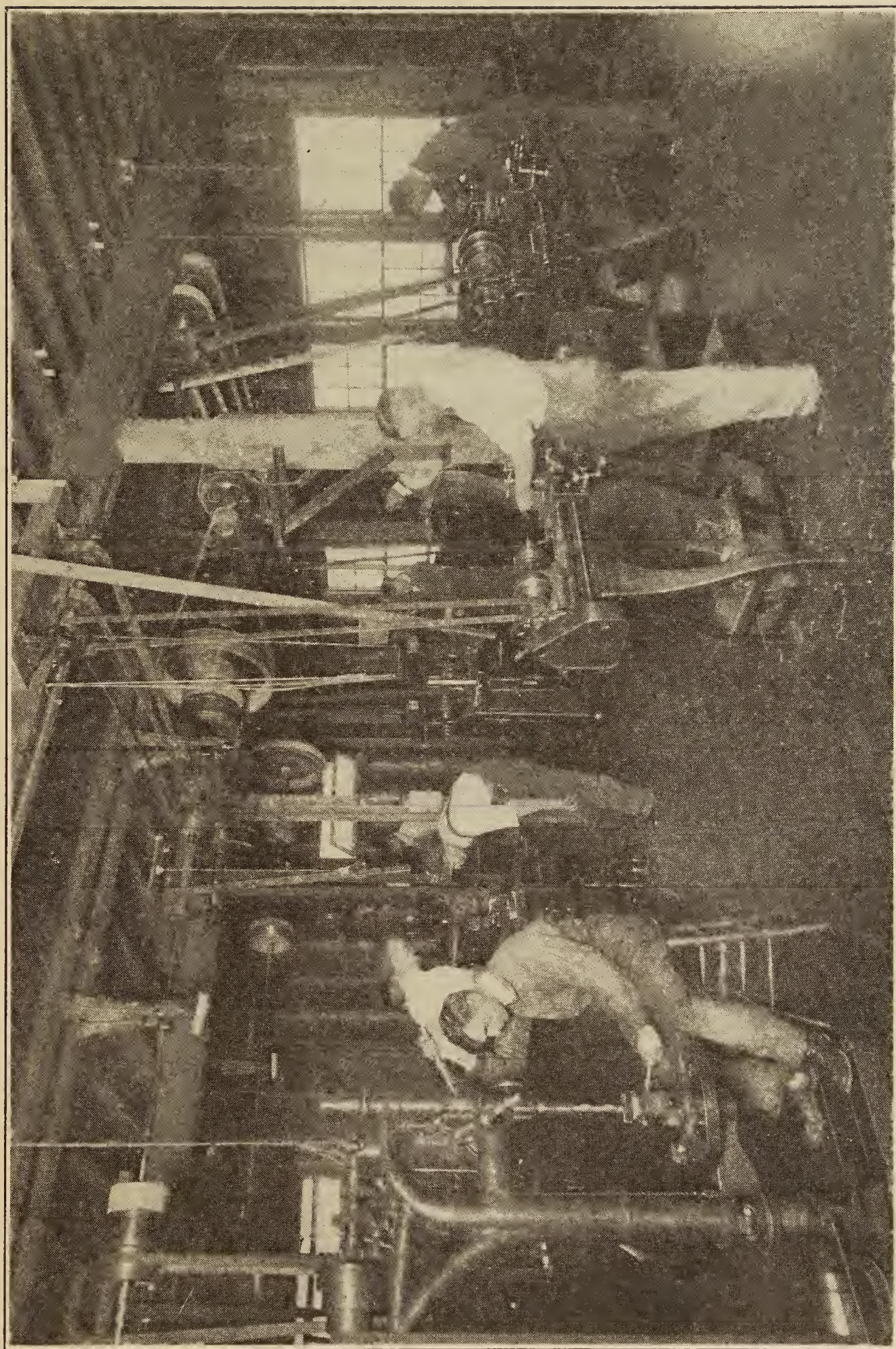
3. Simple coring; green sand, and easy vertical cores.

4. Simple split patterns with horizontal cores.

5. Built-up split patterns.

6. Segmental patterns.

7. Patterns for mechanical projects involving application of above principles. Study of tools and materials, and of special problems in pattern making.



The Machine Shop.

Wood Finishing.

3 units.

This course treats of the various methods of finishing woods. Special emphasis will be given to stains, shellacs, varnishes, fillers, oils and paints and their adaptability to interior and exterior finishes. Practice will be furnished in the use of the above materials upon projects made by the students.

Organization, Equipment and Economics of Shops.

2 units.

Study of tools, kinds, makes, and prices; cleaning and repairs; filing; grinding, whetting, etc.

Planning of equipment to meet conditions, limitation as to number of pupils to be accommodated; expenditure of money, time for instruction, etc.

Estimating cost of equipment, materials and maintenance for a given number of pupils, and for approximate amounts of school funds.

Making of descriptive plan of manual training room, pigeon holes, cases and cabinets, care of supplies, etc.

Arrangement of the benches as to light and working space, etc.

Plan of lumber room, providing for lumber, shelves, stacks, clamp racks; for staining and finishing rooms, exhibition rooms, etc.

Cost of maintenance, etc.

Auto Mechanics.

12 units.

A course designed to acquaint the student thoroughly with conventional automobile construction and methods of repair. Shop work will comprise actual repair practice on modern cars chosen to furnish opportunity for studying different types of construction in rear axles, differentials, transmissions, motors, etc., and to give experience in disassembling, repairing, and reassembling these units.

Lectures which accompany the practical work will be used at opportune times, treating the principles which govern the

design and construction of the chassis units, transmissions—sliding and planetary gears, motors, ignition systems, etc. Also the subject as a whole will be treated in its application to school work as concerns shop buildings, equipment, tool room systems, course of study, etc.

Lectures on the characteristics of the standard engines and motors in the market and on the development of the same with an estimate of their value in the industrial world.

Machine Shop.

24 units.

Includes instruction and practice on the following machines in the making of type projects and the construction of new machinery; machine bench vice, drill press, engine lathe, planer shaper, milling machine, universal tool grinder, etc. The work will be supplemented by lectures on the adaptation of the work to school purposes.

Forging.

9 units.

A general course to include elementary forging, tool steel work and tempering, repair work and decorative forging.

Lectures, discussions and reference readings in the following subjects: materials, tools, equipment; estimating stock; theory and practice of welding and tempering; industrial methods of manufacture, drawing and designing of projects; planning of courses.

Sheet Metal

6 units.

The course begins with the study of the character of the materials used, tin, galvanized iron, zinc, sheet iron, sheet lead, aluminum, copper, brass, solder and fluxes, with the tools and machine equipment for cutting, crimping, bending, breaking, etc.

Processes of laying out, involving use of geometrical principles; of cutting; bending and raising are expressed by articles

of personal or household use—canteens, cups, funnels, measures for oil and gasoline. Architectural features such as cornices, leaden pipe boxes, chimney hoods, lanterns, etc., give valuable practice.

Printing.

6 units.

The shopwork is thoroughly practical and includes all the school's job printing, which is so varied as to give an unusually broad experience in type composition, paper cutting and job press work. Designing and printing of cards, posters, title pages, etc., in one, two and three colors; the cutting of wood blocks and the zinc plate etching give interest and special training. The publication of the school paper employs all the instruction in composition, proportion, and accuracy of make-up of the page of the magazine. Lectures on the history of printing are supplemented by reference readings. Lectures on paper, ink and other materials, their selection and use, on presses, type and general equipment.

A special study is made of the present-day print shop conditions and of organization of courses for the schools.

Shop Mathematics.

3 units.

Considers such topics as trade analysis as a basis for shop mathematics, decimal and fractional equivalents; the metric system in shop problems; solution of shop formulæ by logarithmics; use of the slide rule; belt and speed problems; gear and cam calculations, and such problems as arise in mechanics. Students planning to take this course should provide themselves with a slide rule and logarithmic tables.

Elementary Working Drawing.

3 units.

This course aims to provide a series of drawings appropriate for the upper three grammar grades. The work is closely correlated with the practical problems of the shop.

Mechanical Drawing.

12 units.

Course I. For those having no previous experience in mechanical drawing. Line work and lettering, accurate geometrical construction, orthographic projection, line shading, working drawings, use of French curve, intersections, evolution of solids, isometric projection, perspective, tracings, and blue printing.

Course II. Open to students having entrance credit in drawing, includes a review of Course I and advance work in machine sketching, design and drawing; descriptive geometry, shades and shadows and tinting.

Lectures on materials and equipment, use and care of instruments, planning and presentation of courses, arrangements of drawing and titles, geometrical and design problems.

PHYSICAL EDUCATION.

The Department of Physical Education has greatly broadened the scope of its work and reorganized it to meet the growing demand for training in this branch of education resulting from the physical unfitness of young America as shown in the draft of 1916. To meet this demand, three distinct branches of work are offered:

First—The physical activities of the student body as a whole.

Second—The training of the students in the “General Professional” course.

Third—The training of special students for the special Elementary and Secondary Certificates in Physical Education.

It is truly said that a teacher must be a “good human being” in order to be a good teacher. Her own nervous stability and saneness in the leadership of children, and her ability to stand the strain of her work, are in a large part dependent upon the organic and nervous development and character discipline gained through big muscle activities, and also upon her “keeping fit” through a continuation of these activities. The physical activities of the student body are planned for the purpose of making and keeping the student “fit,” and in no way do they train the student to carry any part of the state program of Physical Education in the schools.

This work consists of a minimum of two hours per week of prescribed activity. During the winter months this time is given to class work in the gymnasium or on an outdoor court. It consists of a brief gymnastic drill planned to relieve the fatigue resulting from the limited movements of the technical work, followed by folk dancing and games. In special cases where the physical condition warrants it, individual “mat” or

corrective work is given in place of the group work. During the late spring and summer months the required time is given to tennis, swimming, archery, baseball or volleyball.

The activities of the students of the General Professional course are planned not only for the health of the student herself but also to give her such training as will enable her to carry out, with the aid of the manual or under supervision, the state program of physical education in the elementary schools.

The courses for special students of Physical Education consist of required schedules of work, outlines of which are listed below.

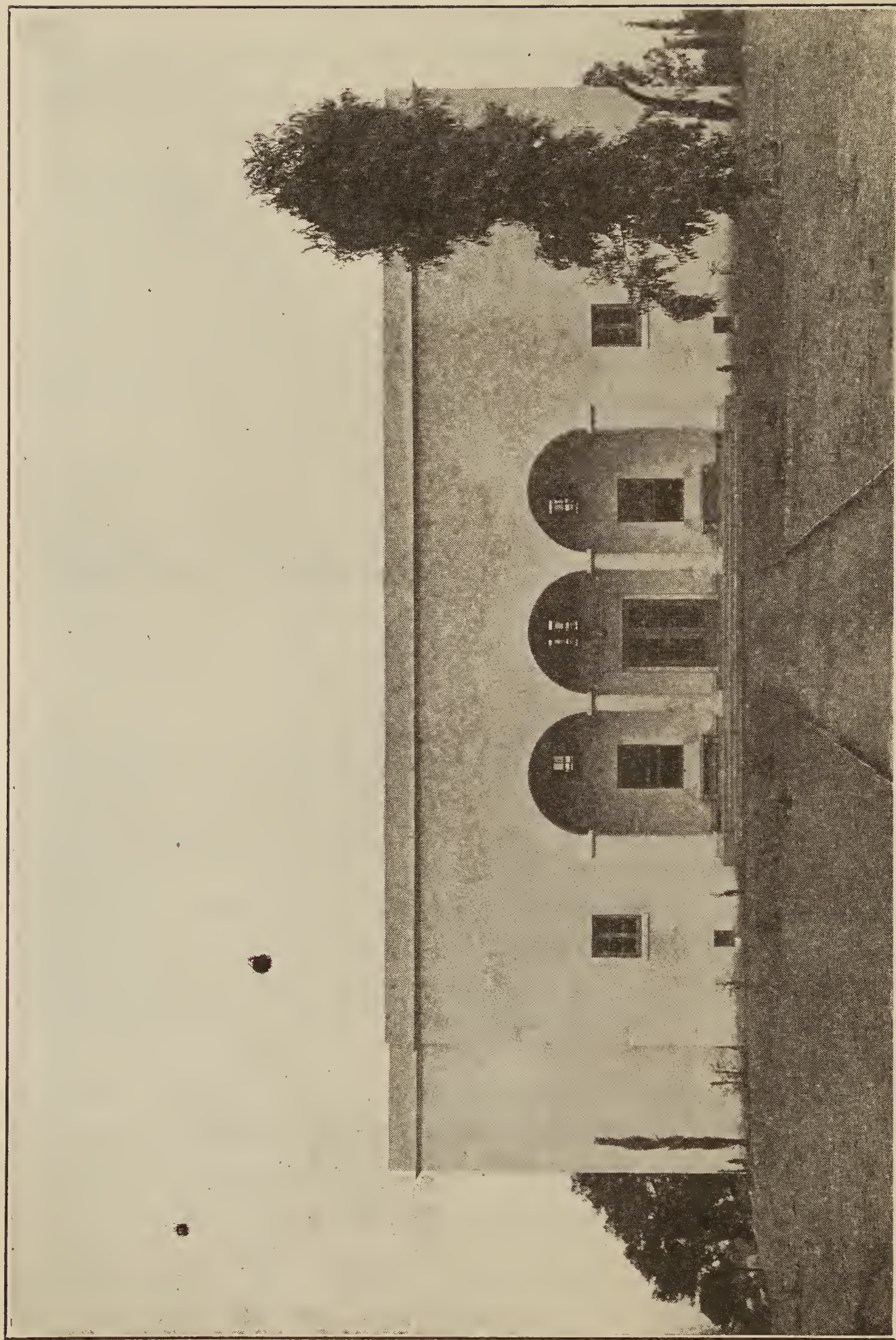
Certificate of Health.

Certificates of health are required of all students. Of students entering the department for the special course, special certificates of health are required for which blanks will be sent upon application.

Costumes.

A gymnastic costume consisting of bloomer suit and flat-soled shoes is required of all students. Students other than those entering as special students of Physical Education who already own presentable gymnasium suits will not be required to order new suits, but students not already owning suits are asked to order the uniform. Students are urged to own a pair of broad-toed, flat-soled gymnasium shoes with straight inner line. The so-called "sneaker" or tennis shoe is accepted but not advised.

Special students in the department are required to have uniform suits, good straight-lined, flat-soled gymnasium shoes and ballet slippers. Students owning suits are advised to bring them to wear until the uniform suit can be obtained.



New Physical Educational Building.

PHYSICAL EDUCATION FOR GENERAL PROFESSIONAL COURSE.

The following work in physical education is required for General Professional certificate. It is planned to meet the needs of the General Professional teacher and in many cases is a modification of the broader and more thorough course required for special certification in physical education. For description of the courses see those listed under like titles under requirements for Special Physical Education certificate.

Courses.

Activities of I and II grades. Practice.
Class Procedure in Formal Activities. Theory and Practice.
Folk Dancing. Practice.
Formal Activities and Apparatus Gymnastics. Practice.
Games. Practice.
Nature and Function of Play. Theory.
Organization and Leadership of Athletic and Playground Activities.
Theory and Practice.
Posture. Theory.

Elementary Certificate in Physical Education.

I. Matriculation Courses for Special Elementary Certificates.

These should be presented for entrance or extra time allowed for them after entrance.

A. Science.

1. Biology (high school).
2. Physics.
3. Inorganic Chemistry.

B. General Educational Courses.

1. Americanization.
2. Psychology.
3. History of Education.
4. Sociology.
5. School Law.

C. Special Methods.

"Personal experience in high school or college physical training activities for at least 2 years beyond the high school."

II. Foundation Sciences.

Anatomy -----	Lecture and Laboratory,	7 units.
Bacteriology -----	Lecture and Laboratory,	5 units.
Biología -----	Lecture and Laboratory,	4 units.
Physiology and Personal Hygiene -----	Lecture and Laboratory,	7 units.
Public Health and Sanitation -----	Lecture,	4 units.

III. Courses in Theoretical Procedure.

Adaptation of Physical Education Activities --	Lecture,	6 units.
Child Nature and Hygiene, and Nature and Function of play -----	Lecture,	3 units.
History and Interpretation of Physical Edu- cation -----	Lecture,	7 units.
Kinesiology -----	Lecture,	4 units.
Equipment and Administration of Gymnasia and Playgrounds -----	Lecture,	2 units
Practice Teaching -----		10 units
The Physical Examination -----	Lecture,	3 units
Teachers' Hygiene -----	Theory and Practice,	3 units.
Teaching Hygiene -----	Theory and Practice,	3 units.

IV. Special Methods.

A. Activities of I and II Grades --	Theory and Practice,	2 units.
B. Athletics.		
Organization and Leadership of Athletics -----	Theory and Practice,	4 units.
Outdoor Sports -----	Practice,	4 units.
C. Games.		
Hunting, Tag, Simpler Athletic Games --	Practice,	3 units.
D. Dancing.		
Aesthetic -----	Practice,	5 units.
Folk -----	Practice,	2 units.
E. Gymnastics.		
Class Procedure in Formal Activities -----		
-----	Theory and Practice,	5 units.
Formal Activities and Apparatus Gymnastics ---		
-----	Practice,	12 units
Remedial and Corrective Gymnastics ---	Lecture,	6 units
Practical Remedial Gymnastics.		

V. Electives.

9 units.

Courses required or elective under Secondary certificate.

Secondary Certificate.**I. Matriculation Courses for Special Secondary Certificates.**

These should be presented for entrance or extra time allowed for them after entrance.

A. Science.

1. Biology.
2. Physics.
3. Inorganic Chemistry.

B. General Educational Courses.

1. Americanization.
2. History of Education.
3. Psychology.
4. School Law.
5. Sociology.

C. Special Methods.

"Personal experience in high school or college physical training activities for at least 2 years beyond the high school."

II. General Educational Courses.

Secondary Education-----Lecture, 4 units.

III. Foundation Sciences.

Anatomy -----Lecture and Laboratory, 7 units.
 Bacteriology -----Lecture and Laboratory, 5 units.
 Biology -----Lecture and Laboratory, 4 units.
 Organic Chemistry -----Lecture and Laboratory, 10 units.
 Physiological Chemistry -----Lecture and Laboratory, 6 units.
 Physiology and Personal Hygiene-----
 -----Lecture and Laboratory, 7 units.
 Public Health and Sanitation-----Lecture, 4 units.

IV. Courses in Theoretical Procedure.

Adaptation of Physical Education Activities--Lecture,	6 units.
Child Nature and Hygiene and Nature and Function of Play-----Lecture,	3 units.
History and Interpretation of Physical Education-----Lecture,	7 units.
Kinesiology-----Lecture,	4 units.
Equipment and Administration of Gymnasias and Playgrounds -----Lecture,	2 units.
The Physical Examination-----Lecture,	3 units.
Physiology of Exercise-----Lecture,	3 units.
Practice Teaching-----Practice,	10 units.
Teachers' Hygiene-----Theory and Practice,	3 units.
Teaching Hygiene -----Theory and Practice,	3 units.

V. Special Methods.

A. Activities of I and II Grades--Theory and Practice,	2 units.
B. Athletics.	
Organization and Leadership of Athletics-----	
-----Theory and Practice,	4 units.
Outdoor Sports -----Practice,	4 units.
C. Dancing.	
Aesthetic, etc. -----Practice,	6 units.
Folk -----Practice,	3 units.
Theory of Dancing-----Lecture,	1 unit.
D. Games.	
Hunting, tag, simpler athletic games----Practice,	3 units.
E. Gymnastics :	
Class Procedure in Formal Activities-----	
-----Theory and Practice,	5 units.
Formal Activities and Apparatus Gymnastics---	
-----Practice,	15 units.
Remedial and Corrective Gymnastics---Lecture,	6 units.
Practical Remedial Gymnastics.	
F. Electives -----	4 units.
Special Methods—	
Advanced Remedial Gymnastics.	
Advanced work in Dancing.	
Playground courses not included in above.	

Related Subjects—

- Children's Literature.
- Primary Hand Work.
- Elementary Sewing.
- Voice and Diction, etc.

DESCRIPTION OF COURSES.

I. Matriculation Courses for Special Elementary and Secondary Certificates.

These should be presented for entrance or extra time allowed for them after entrance.

A. Science.

1. Biology (high school).
2. Physics.
3. Inorganic Chemistry.

B. General Educational Courses.

1. Americanization.
2. History of Education.
3. Psychology.
4. School Law.
5. Sociology.

C. Special Methods.

"Personal experience in high school or college physical training activities for at least 2 years beyond the high school."

II. General Educational Courses.

For description of these courses see Education.

Secondary Education ----- 4 units.

Required for Special Secondary certificate.

III. Foundational Sciences.

For description of these courses see Science Department.

1. Anatomy ----- 7 units.

Required for Special Elementary and Secondary certificate.

2. Bacteriology----- 5 units.

Required for Special Elementary and Secondary certificate.

3. Biology----- 4 units.

Required for Special Elementary and Secondary certificate.

4. Organic Chemistry (prerequisite of Physiological Chemistry)----- 10 units.
Required for Special Secondary certificate.
5. Physiological Chemistry----- 6 units.
Required for Special Secondary certificate.
6. Physiology and Personal Hygiene----- 7 units.
Required for Special Elementary and Secondary certificate.
7. Public Health and Sanitation----- 4 units.
Required for Special Elementary and Secondary certificate.

IV. Courses in Theoretical Procedure.

1. Adaptation of Physical Education Activities----- 6 units.
A study of the adaptation of physical education activities to age and sex with special emphasis upon gymnastic progression.
Required for Special Elementary and Secondary certificate.
Theory.
2. Child Nature and Hygiene and Nature and Function of Play ----- 3 units.
Required for Special Elementary and Secondary certificate.
Theory.
3. History and Interpretation of Physical Education-- 7 units.
Interpretation of Physical Education through a brief study of physical activities from prehistoric times and a more thorough consideration of its more recent history and present organization.
Required for Special Elementary and Secondary certificate.
Theory.
4. Kinesiology ----- 4 units.
A discussion of the mechanism of natural and formal movements of Physical Activities.
Required for Special Elementary and Secondary certificate.
Theory.
5. Equipment and Administration of Gymnasias and Playgrounds----- 2 units.
Required for Special Elementary and Secondary certificate.
Theory.
6. The Physical Examination----- 3 units.
A discussion of the purposes, scope and procedure of the Physical Examination.
Required for Special Elementary and Secondary certificate.
Theory and Practice.

7. Physiology of Exercise----- 3 units.
 An advanced course in Special Physiology dealing with the effect of exercise upon physiological functioning.
 Required for Special Secondary certificate. Theory.
8. Playground Courses.
 Elective for students entering with advanced standing.
 Offered only when elected by given number of pupils.
 (a) Organization and Administration of
 Playground-----Theory, 1 unit.
 (b) The Playground Movement-----Theory, 3 units.
 (c) Social Conditions of the Neighbor-
 hood-----Theory, 1 unit.
9. Posture ----- 1 unit.
 A study of the correct body posture and methods of training and testing it.
 Required for General Elementary certificate. Theory and Practice.
10. Practice Teaching----- 10 units.
 The teaching of classes in the grade and intermediate schools of the city.
 Required for Special Elementary and Secondary certificate. Practice.
11. Teachers' Hygiene----- 3 units.
 A combination of modified courses in First Aid, Home Nursing and Symptomatology.
 Required for Special Elementary and Secondary certificate. Theory and Practice.
12. Teaching Hygiene----- 3 units.
 A discussion of subject-matter and method of teaching hygiene in the schools.
 Required for Special Elementary and Secondary certificate. Theory and Practice.

V. Special Methods.

- A. Activities of I and II Grades----- 2 units.
 Required for Special Elementary and Secondary certificate. Theory and Practice.

- B. Athletics ----- 4 units.
1. Organization and Leadership of Athletics. A study of the organization and leadership of athletics; discussion of individual and dual stunts, principles of training and technique; practice.
Required for Special Elementary and Secondary certificate. Theory and Practice.
 2. Out-door sports----- 4 units.
10 hours practice and 2 hours coaching each sport, except swimming 22 hours practice, 2 hours coaching.
Baseball, Archery, Swimming, Basket-ball, Hockey, Tennis, etc.
- C. Dancing.
1. Aesthetic, Interpretative, National, Character Dancing.
Secondary----- 6 units.
Elementary----- 5 units.
Required for Special Secondary and in part for Elementary certificate. Practice.
 2. Folk Dancing.
Secondary----- 3 units.
Elementary----- 2 units.
Required for Special Secondary and in part Elementary certificate. Practice.
 3. Theory of Dancing----- 1 unit.
Principles of teaching dancing, relation of music to dancing.
Required for Special Secondary certificate. Theory.
- D. Games----- 3 units.
Hunting, Tag, Simpler Athletic Games.
Required for Special Secondary and Elementary certificate. Practice.
- E. Gymnastics.
1. Class Procedure in Formal Activities----- 5 units.
Instruction in management of class in formal activities and the art of the gymnastic command. Practice in giving commands and in handling groups of fellow students. Preparatory for practice teaching in schools.
Required for Special Elementary and Secondary certificate. Theory and Practice.

2. Formal Activities and Apparatus Gymnastics.
Secondary----- 15 units.
Elementary ----- 12 units.
Required for Special Secondary and in part for Special
Elementary certificate. Practice.
3. (a) Remedial and Corrective Gymnastics---- 6 units.
Required for Special Elementary and Secondary
certificate. Theory.
- (b) Applied Remedial and Corrective Gymnastics.
Elective for students entering with advanced stand-
ing. Prerequisite 2-a.
- (c) Practical Remedial Gymnastics.
Required of all students. Corrective work given
for students' personal benefit. Practice.

O

